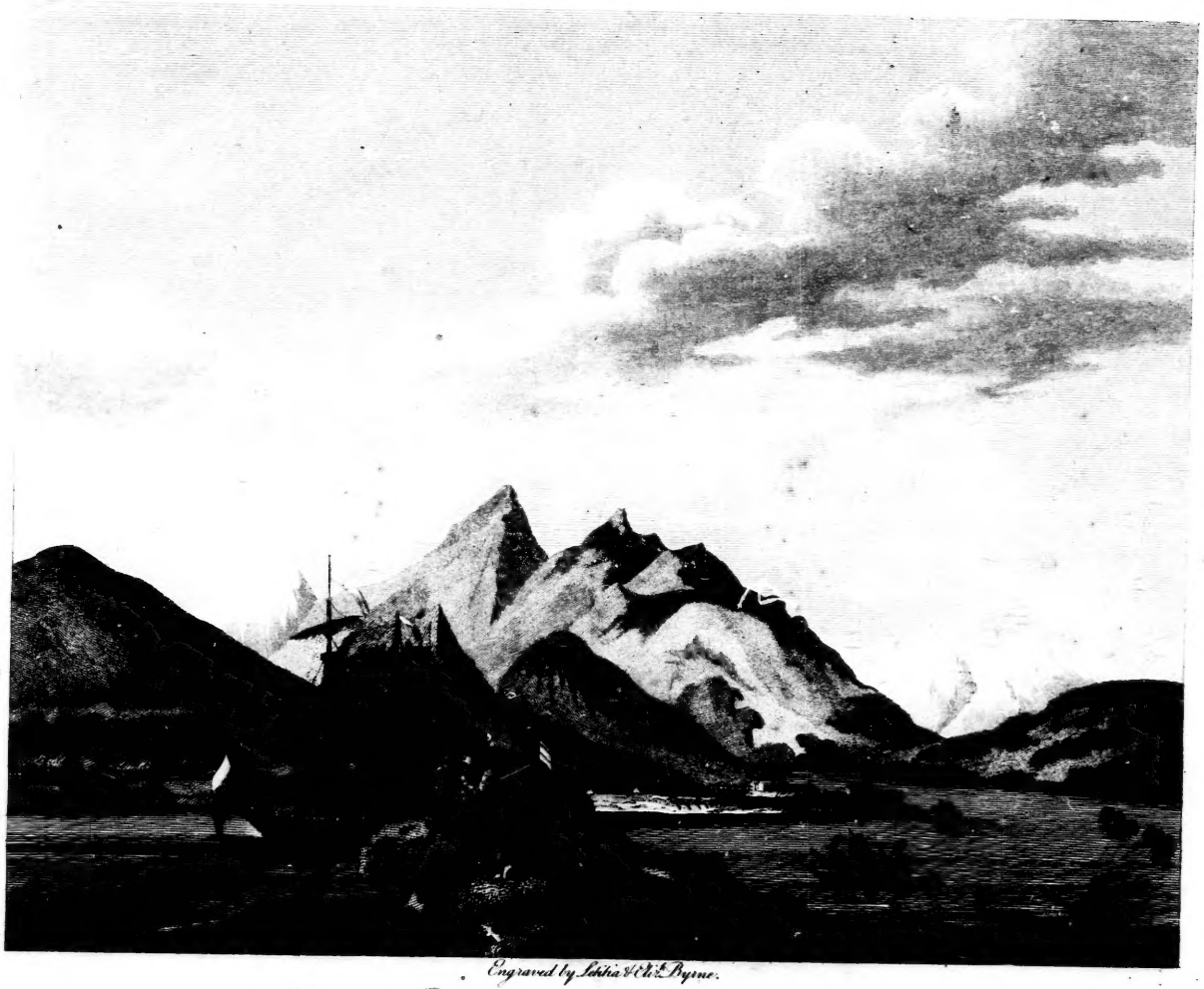

Engraved by Letitia & Elizt. Byrne.

View of the Russian Settlement at Oonalashka.

Ino. Michell

VOYAGES AND TRAVELS

IN

VARIOUS PARTS OF THE WORLD,

DURING

THE YEARS 1803, 1804, 1805, 1806, AND 1807.

DEPARTMENT OF THE INTERIOR
APR 28 1904
GEOGRAPHER

BY

G. H. VON LANGSDORFF,

AULIC COUNSELLOR TO HIS MAJESTY THE EMPEROR OF RUSSIA,
CONSUL-GENERAL AT THE BRAZILS, KNIGHT OF THE ORDER OF ST. ANNE, AND MEMBER OF
VARIOUS ACADEMIES AND LEARNED SOCIETIES.

PART II.

CONTAINING

THE VOYAGE TO THE ALEUTIAN ISLANDS AND NORTH-WEST COAST OF AMERICA,

AND RETURN BY LAND OVER THE

NORTH-EAST PARTS OF ASIA, THROUGH SIBERIA,

TO

PETERSBURGH.

Illustrated by Engravings from Original Drawings.

LONDON:
PRINTED FOR HENRY COLBURN,
ENGLISH AND FOREIGN PUBLIC LIBRARY, CONDUIT-STREET, HANOVER-SQUARE;
AND SOLD BY GEORGE GOLDIE, EDINBURGH; AND
JOHN CUMMING, DUBLIN.

1814.

Engraved by Lebbia & Co. Ld. Bayne.

View of the Russian Settlement at Oonalashka.

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EXPLANATION OF THE PLATES.

Map of the Author's Route.—Page 1.

Plate I.

The Frontispiece.—A View of the Russian Settlement at Oonalashka.

The village of Illuluk lies upon a small low neck of land. The mounds, which have the appearance of graves, are the earth-huts of the inhabitants. Near them are several crosses, which were erected to the memory of some Russians of distinction who died on this island: a sort of scaffolding is seen not far from them, on which fish are hung up to be dried. In the foreground are some Aleutians in their leather canoes or *baidarkas*, who are throwing their javelins. The small long narrow objects upon the ground near the huts are baidarkas turned upside down: when not in use, they are always laid up in this way along the shore.

Plate II.—Page 48.

Household Utensils and other Objects from Alaksa, Oonalashka, and Kodiak.

1. A bag made of fish skins from Alaksa.
2. A leather finger-case, used as a shield by the women of Alaksa when they are sewing.
3. A rattling sort of instrument from Kodiak, made of the beaks of sea-parrots, and used to beat the time in dancing.

4 and 5. Ornaments for the ears, made of the shell called the sea-tooth.

6. A lip ornament of the Aleutians, of its natural size, made of pieces of bone and glass beads: it is ingeniously inserted into an opening made in the under lip.
7. Specimen of a sort of embroidery done by the women of Oonalashka, upon leather, with the hair of the rein-deer.
8. A head-dress, made of mole-skins from Alaksa.
9. A basket made of straw from Oonalashka.

10 and 11. Straw pocket-books from Oonalashka.

12. A head-dress with a great deal of embroidery, only worn by the Aleutians at their dancing-festivals. The bunch of goats-hair flying about is considered as extremely ornamental.

43648

EXPLANATION OF THE PLATES.

Plate III.—Page 114.

The Kaluschians of Sitcha, dancing.

They are dressed in a simple garment, or in a sort of carter's frock, which they purchase from the merchants of the United States of America. In their hands they each hold a tail of the white-headed eagle. The ermine skin round the head, upon the cloaths, and sometimes held in the hand, is a mark of wealth and luxury. The foremost dancer has in his hand a stick ornamented with sea-otters teeth, with which he beats time. Some of the dancers have their heads powdered with the small down feathers of the white-headed eagle. The women sit by the dancers and sing: they have the very extraordinary national ornament to the under lip. In the background is a moveable hut of the Kaluschians.

Plate IV.—Page 195.

A Dance of the Indians at the Mission of St. Joseph, in New California.

The figures are all naked except a covering round the waist. The national physiognomy is tolerably well preserved. The hair of these people is very coarse, thick, and stands erect: in some it is powdered with down feathers. Their bodies are fantastically painted with charcoal-dust, red clay, and chalk. The foremost dancer is ornamented all over with down-feathers, which gives him a monkey-like appearance: the hindermost has had the whimsical idea of painting his body to imitate the uniform of a Spanish soldier, with his boots, stockings, breeches, and upper garments. Near these Indians, at the foot of a tree, is a fire, from which the dancers every now and then snatch out a piece of glowing ember and swallow it.

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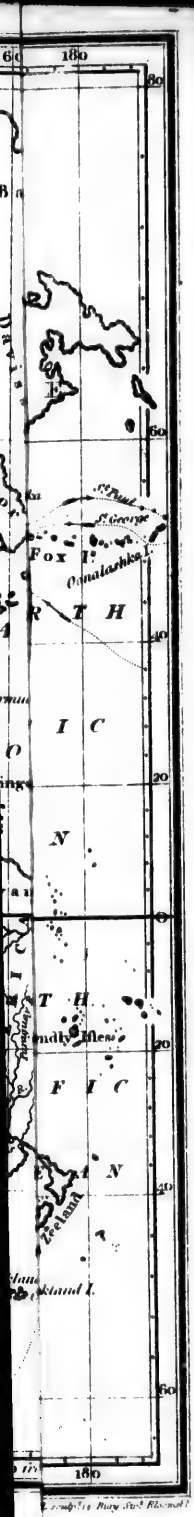
ARCTIC SEA
Baffins Ba
Slave Lake
Hudsons Bay
Labrador
NORTH AMERICA
CANADA
Quebec
Fox I.
Oonalashka I.
Norfolk Sound
King George Archipelago
Oonalashka I.
NORTH PACIFIC OCEAN
New Albion
California
Louisiana
UNITED STATES
Washington
Har. of S. Francis
G. of Mexico
St. Domingo
Caribbean Sea
SANDWICH ISLES
Owhyhee
Equator
Galapagos
Quito
QUITO
Amazon R.
Lima
PERU
Washingtons I. or Marquesas
Nukahiwa I.
Society I.
Otaheite
Easter I.
SOUTH PACIFIC OCEAN
Juan Fernandez
Buenos Ayres
Zeeland
Falkland
Cape Horn
Longitude West
160
140
120
100
80
60
180



INTRODUCTION.

Soon after our arrival in the Harbour of St. Peter and St. Paul, a considerable change took place in our future plans. The embassy to Japan having fulfilled its mission, the Chamberlain, Von Resanoff, proposed going immediately over land to St. Petersburgh, that he might give an account of it in person to His Majesty the Emperor; but some letters which he received at Kamschatka determined him to abandon this resolution, and to visit the Aleutian Islands, and the north-west coast of America, particularly the most distant possessions of the Russians in these parts, as plenipotentiary of the Russio-American Trading Company. Counseller Von Tosse, one of the cavaliers of the embassy, was consequently dispatched as a courier to St. Petersburgh to carry the report of the proceedings.

As soon as the ambassador and his train were put on shore, Captain Krusenstern applied himself without delay to clearing the ship of all superfluous objects, some of the principal of which were the presents intended for the Emperor of Japan, that he might proceed with the vessel lightened as much as possible in the enterprise he had been obliged to abandon on

London, Published Feb. 1st 1814 by Henry C

MAP
of the
WORLD
Illustrating the Voyages
and Travels of
G. H. VON LANGSDORFF
ARCTIC SEA
SPITZBERGEN
NOVA ZEMBLA
Iceland
Lapland
RUSSIAN EMPIRE
Petersburg
Moskow
Tobolsk
Tomsk
Irkutsk
Jakutsk
Ochotsk
OCHOTSK SEA
Kamschatka
Fox I.
Onalaschka
NORTH PACIFIC OCEAN
ASIA
CHINESE EMPIRE
TARTARY
Coast of Tartary
Pekin
JAPAN SEA
JAPAN
Jedo
ISLES
Kiusiu
CHINA
Canton
Philipine Islands
Ladrone Isles
CHINA SEA
Ispahan
PERSIA
HINDOSTAN
Calcutta
ARABIA
Mecca
Ceylon
Borneo
Java
New Guinea
INDIAN OCEAN
SOUTH PACIFIC OCEAN
New Hebrides
Friendly Isles
New Caledonia
NEW HOLLAND
Botany Bay
New Zealand
Auckland I.
Kerguelens Land
Madagascar
Mozambique Channel
Cape of Good Hope
C. Negro
St. Helena
Gough's I.
Ascension
St. Matthew
Gulf of Guinea
GUINEA
CONGO
BOROROS
SOFALA
ZANGUEBAR
SOUDAN or NIGRITIA
Sahara or Great Desert
MOROCCO
Morocco
BARBARY
TRIPOLY
MEDITERRANEAN
Madrid
Paris
Vienna
AUSTRIA
FRANCE
Falmouth
Copenhagen
Stockholm
Bergen
Abo
Obi
Lena R.
Yenisei R.
Indus R.
Ganges
Caspian Sea
Black Sea
Turkey
Asia Minor
Sea of Azof
Sea of Aral
Sea of Okotsk
Sea of Japan
Gulf of Tartary
Gulf of Kamschatka
Gulf of Siam
Gulf of Bengal
Gulf of Persia
Gulf of Mecca
Gulf of Aden
Gulf of Ormuz
Gulf of Cambay
Gulf of Mexico
Gulf of Nigre
Gulf of Guinea
Gulf of Carpentaria
Gulf of Tonquin

the twenty-sixth of May, namely, the examination of the northern coast of Tschoka as far as the mouth of the Amur; he then proposed returning once more to Kamschatka, to prepare for the farther objects of his voyage, and take in a stock of provisions that would last to Canton.

Captain Von Foedoroff, and Lieutenant Koscheleff, with the guard of honour, remained at Kamschatka, where they resumed their former situations; Major Friderici, who took a greater interest in obtaining a more accurate knowledge of these remote provinces, than in ascertaining with precision the geographical situation of the northern coast of Tschoka, resolved to accompany Lieutenant Koscheleff, the brother of the commandant, to Nischnei Kamschatka, that he might during the absence of the ship make himself thoroughly acquainted with this remarkable peninsula; after this, he purposed returning to Europe with Captain Krusenstern.

The Ex-ambassador Von Resanoff, not judging it expedient to wander among the rugged, uncultivated, and inhospitable north-west coasts of America, without the attendance of a physician, made very advantageous proposals to me to accompany him. It remained therefore for me to choose between following our amiable chief, Captain Krusenstern, in his examination of Tschoka, his voyage to Canton, and return to Europe by sea, or visiting the more distant Russian possessions, and then returning by land to the Russian capital, over the north-east parts of Asia, and through Siberia. My choice, determined in many respects by accessory considerations, was made for accepting the ambassador's proposals; it seemed so

much a debt due to science to undertake a journey to parts so little known, and which had received so little scientific examination, under auspices to all appearance particularly favourable, that I could scarcely consider myself as justified in declining it.

The friendship and harmony which had reigned between Captain Krusenstern and all who were under his orders on board the Nadeschda was such as is scarcely to be paralleled in any expedition of the kind; our separation could not therefore but be the subject of much regret to me, nor can I take leave of my former companions without making my public acknowledgments to them in this place for the friendship uniformly shewn me by them. My grateful thanks are more particularly due to the captain himself, to Doctors Horner, Tilesius, and Espenberg, and to Major Friderici, for the many proofs of confidence shewn me by them, and for the kind support I received from them on a variety of occasions.

Before I enter upon my new excursion, it appears necessary to offer some preliminary observations, that my readers may be better acquainted with the point of view under which my future remarks and descriptions are to be regarded.

It has been already noticed in the first part of my work that I had hitherto occupied myself very little with acquiring the Russian language, that I had indeed had little opportunity of doing so. As I stated in the preface, I had never been in Russia previous to this expedition, and during its progress, all those with whom I was in the habits of constant intercourse could speak either the German, French, or English languages,

so that I had really no occasion for it. I was besides so much occupied with a variety of other objects that I scarcely thought of turning my attention towards the study of a language which could not, at that moment at least, be of any particular use to me.

The case was very different in the new undertaking upon which I was entering. In Kamschatka, as well as in the Aleutian Islands, and on the north-west coast of America, not only are Russians to be met with every where, but even the greater part of the natives speak the Russian language pure and unmixed, some native provincialisms alone excepted. The want of a knowledge of this language has therefore occasioned many deficiencies which will perhaps be observable in the following sheets.

At our arrival in the Harbour of St. Peter and St. Paul we found the Russio-America Company's brig Maria ready to sail for Kodiak. Lieutenants Von Schwostoff and Von Davidoff, two well-informed naval officers, who had associated themselves together for the purpose of making voyages to America, in order to place the Marine of the Russio-American Company upon a better footing, to build ships, to train up sailors, &c. &c., had come with their vessel from Ochotsk the preceding autumn. They were now going for the second time from St. Petersburgh to Kodiak, and the favourable report they made of the establishment on that island contributed greatly to decide our chief to direct his course thither. To these excellent men I am under very important obligations, particularly to Lieutenant Davidoff, who frequently, with the greatest indulgence and kindness of heart, satisfied my curiosity, undertaking through the medium of the

French language to serve as interpreter to me. After having twice travelled together from St. Petersburgh to America, these gentlemen returned from their last excursion in the year 1808. In 1809 they served in the war against Sweden, and distinguished themselves exceedingly. In the latter end of the same year the world was too soon deprived of their services. Attempting to cross the draw-bridge over the Neva in a very dark night, taking a false step, they fell into the water, and were immediately carried away by the rapidity of the stream. More particulars with respect to this unfortunate event will be found in a future chapter. Lieutenant Davidoff's account of his travels is already in the press, and will probably contain a great many very interesting observations.

In this second part of my travels I have thought it expedient to intersperse more nautical and geographical observations, as well as to be more diffuse on subjects of natural history, than in the first. The simple description of waste and barren countries would of itself not have afforded sufficient interest to make my work palatable to the reader, and I besides considered it as a duty to fix my attention on every object that came in my way either by land or by water. I shall also here follow, without any exception, the universally received mode among the Russians, of reckoning according to the Julian computation of time, by which I hope the better to avoid errors.

Many valuable observations with respect to the Aleutian Islands, as to the early part of their history, the nature of the soil, the situation of the inhabitants, and the time when they

were probably first peopled, which I have thought unnecessary to repeat in this place, may be found principally in the following works. Müller's Collection of Russian History, vol. 3.---Fischer's History of the Conquest of Siberia.--- Pallas's Northern Essays.---Billing's Travels to the Northern parts of Russian Asia and America, from the Year 1785 to 1794.---Gavrila Sarytscheff's eight Years Travels in the north-eastern parts of Siberia, to the Icy Sea, and the Northern Ocean.---A Russian Journal, published by J. H. Busse at St. Petersburgh, between 1794 and 1798.

The account of the establishment of the Russio-American Company, whose possessions I was now about to explore, with a sketch of their laws and statues, are so well known to the world through the journal of the Counsellor of State, Von Storch, and the Introduction to Captain Krusenstern's voyage, that it seems altogether superfluous here to repeat the details; I only mention to the reader where information concerning them is to be found, that he may know, if he desires it, what this company might be, and ought to be.---What it really is, a sense of propriety does not permit one always to say in direct terms.

I hold it however a duty, living as I do under the wise and upright government of a monarch who seizes every opportunity of promoting in all possible ways the prosperity of his subjects, to point out some abuses but little known; the rather as it is impossible for him, as well as for every other ruler, to promote as he wishes the improvement of the whole, if single wants are not made known to him; and I should take upon myself a double

responsibility if I were to remain wholly silent upon the situation of the Russio-American Company.

Sauer has already in many places in his travels* described, though in but faint colours, scenes, which probably will be found represented in more forcible ones in the travels of Lieutenant Davidoff, and which I cannot possibly pass over wholly in silence. It is true, that the direction of the Russio-American Company at St. Petersburgh, through the care and support of the Commercial Counsellor Benedict Cramer, has in these latter years undergone several changes very much to its advantage. The most upright man however cannot, with the very best intentions, and the utmost exertion, swim against the stream.

---

* See Travels in the Northern parts of Russian Asia and America between the years 1785 and 1794, by Martin Sauer, published at Weimar in 1803.

PART II.

VOYAGE TO THE ALEUTIAN ISLANDS,

AND THE

NORTH-WEST COAST OF AMERICA,

AND RETURN BY LAND OVER THE

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TO

PETERSBURGH.

VOYAGES AND TRAVELS.

CHAPTER I.

Departure from Kamschatka.—Voyage along the Aleutian Islands.—The Islands of St. Paul and St. George.—Description of St. Paul.—Voyage to Oonalashka, and arrival there.

In the evening of the thirteenth of June, 1805, old stile, all our goods and chattels were carried on board the galliot Maria, and early on the following morning we sailed out of Awatscha bay. The Maria was a heavy sailing two-masted vessel, of a hundred and fifty tons, built at Ochotsk, and was under the command of a lieutenant of the navy, by name Andrew Wassilitsch Maschin: with him went as passengers the Chamberlain Von Resanoff, and his valet-de-chambre, the two officers above-mentioned, Lieutenant Nicholas Alexander Schwostoff, and Lieutenant Gavril Ivanovitsch Davidoff, a huntsman who was to serve as caterer, and myself.

The high hills and capes of Kamschatka were at our departure still covered with snow. For several days we had alter-

nately a light breeze, or an entire calm, and were completely enveloped in fog. On the twenty-fourth of June we were, for the first time, able to make an observation by the sun.

Instead of sailors, we had on board about sixty persons who were in the service of the Russio-American Company, as hunters of game, or collectors of furs. Our crew was composed of adventurers, drunkards, bankrupt traders, and mechanics, or branded criminals in search of fortune. Most of them, though they had made the voyage from Ochotsk to Kamschatka the preceding year, had, notwithstanding, to learn anew even the names of the sails and ropes: they were always standing in each other's way, and in case of a change of wind, fifteen men could scarcely perform the service which would have been amply performed by ten ordinary sailors: the ship was, besides, so filled with goods and stores of different kinds, that the greater part of the crew were obliged by turns to remain upon deck. When we reflect, moreover, that for a considerable part of the winter these people are fed very sparingly at Kamschatka, by the Russio-American Company, and that bread, with dry and frozen fish, or the fat of whales and sea-dogs, form their principal nutriment, it will easily be imagined that they must be pretty generally infected with the scurvy: even by the use of Kamschadale garlick, and some fresh fish, as the spring advanced, they were still by no means recovered from it. This circumstance required so much the more attention, inasmuch as the navigation of a ship in these climates is attended with peculiar difficulty; the sun is so perpetually obscured by the moist fogs, even the whole summer through, that there are but few days

when it disperses them entirely, and the air becomes perfectly clear. Notwithstanding this, the number of our diseased did not encrease so much as I had at first been led to expect.

Nor were the crew less poorly clothed than fed. From their great want of linen in particular, it was almost impossible that they should not be overrun with vermin. We could scarcely, therefore, visit the only place where fresh air was to be inhaled, the confined deck, since these dirty disgusting men were sitting about it every where, disencumbering themselves of their troublesome guests. Nowhere, either by day or night, could one turn without receiving proofs of the diligence and activity of these lovers of the chase in catching their game. The utmost precaution and attention to cleanliness, in a constant change of our linen, could scarcely secure us, confined as we were in a very small cabin, from being molested by the noxious animals: indeed, from the first of my being aware of the grievance, I was kept in a constant sort of fever of disgust and horror at the idea of them.

Scarcely had a day passed since our departure from Kamschatka, that we were not surrounded by a vast number of seafowl, among which I particularly remarked the *diomedea exulans*, or albatross, the *alca cirrhata*, or tufted auk, several species of pelicans, and of *larus*, or gulls. On the twenty-fourth of June, the first clear day, towards evening, we saw in the south-south-west the north-eastern side of the island of Attu, the most westerly of the Aleutian islands. The Russians call this, with the islands of Semitsch and Agattu, the nearest islands, *Plishnie Ostrowa*, because they lie the nearest to the coast of

Kamschatka. Attu is distinguished by two harbours, one of which is on the southern coast, in latitude 52° 56′ north.

The following day was again cloudy and rainy, so that we could not see any thing of the island of Andreanoff, the next in continuing in an easterly direction. On the twenty-ninth the horizon was again somewhat clearer, and we saw indistinctly through the fog the *Tschetiri Soposchnaia Ostrowi*, or four hills which belong to the Fox Islands. A fresh north wind carried us farther to the east, and next morning we again saw land, which on a more accurate examination we distinguished to be the first place where we were destined to go on shore, the island of Oonalashka. The wind had sunk almost entirely, and at noon we found ourselves before the harbour, without being able to run into it. We made use of the calm, however, to hoist out a boat, and with our guns killed some peterels, *procellaria nigra*, which were swimming in abundance upon the water, and so tame that they came almost within an oar's length of us. These birds afforded us an excellent repast, though they have a very fishy or oily taste.

Towards evening a brisk south-east wind sprung up, which prevented our getting nearer to the island, and as it continued on the following morning, our chief, Von Resanoff, determined to sail away for St. Paul and St. George, two islands at the distance of a hundred and ninety sea miles from Oonalashka. As they have been but little visited, they are consequently little known; and he wished to inspect the establishment of the Russio-American Company there. Accordingly, about nine o'clock the direction of the ship was changed, and the hitherto

contrary wind rendered favourable to us: we steered towards St. George, running at the rate of six knots and a half in the hour. At noon we remarked a great number of porpoises about the ship, the bellies of which, down to the tail, with the tail itself, were as white as snow.

On the second of July, in the morning, we saw a vast number of sea-birds about the ship, most of which belonged to the *colymbus*, *larus*, and *pelican* species. Towards noon we had reached, according to our reckoning, the place in which the island of St. George is laid down in the maps; that is, latitude 56° 20′ north, longitude 169° west.* The numberless flights of sea-birds, the shoals of seals and sea-bears, *phoca ursina*, and the lead, which gave us thirty-five fathom of water, all indicated the neighbourhood of land. The wind had increased so much, with a thick fog and heavy rain, that we were obliged to use the utmost circumspection in order to keep at a proper distance from the supposed land. We could scarcely see a sea mile round us, and night closed in without our having discerned the island.

On the third, in the morning, we found ourselves in between forty and forty-five fathom water: from the frequent tacking of the ship, the brisk wind, and the strong current, we could not keep in a proper easterly direction. The number of birds had decreased very much, but the fog, the rain, and cold weather, continued, so that we could entertain little hope, without the opportunity of making an observation by the sun, of finding a small island.

* The calculations of the longitude are very rarely wholly correct, as they are commonly founded only on the ship's reckonings.

The strong south-west wind continuing, we were driven sometimes to the north-west, sometimes to the east, and towards noon on the fourth, were again in between thirty and thirty-five fathom water, so that we presumed ourselves to be near the island of St. Paul. Thick fog, rain, and wind, with the continued fruitless hope that we must be near land, rendered this day the most disagreeable that we had passed since our departure from Kamschatka. We could see but a very little way round us, and in that space could nowhere discern land. In the afternoon we observed a dead sea-cow, *trichecus rosmarus*, near our vessel.

Towards evening, on the fifth, the wind at length abated, and as the horizon was on the following morning somewhat clearer, we saw, to our very great satisfaction, the island of St. Paul at no great distance from us. We steered towards the north-east point, and dropped our anchor at length in fifteen fathom water, between two and three versts from the shore. The boat was immediately hoisted out, and led on by eager curiosity, and the novelty of the objects, we made our way eagerly to the shore, over a clear and calm sea.

A large bay is formed by the north-eastern point of this island, but on account of the shallowness of the water, none but small ships can find shelter in it. The shore here is flat, and only varied by low hills; on some of them are to be seen crosses, such as the Russians commonly erect when they take possession of a new country.

Along the flat coast is a black, shining, hard sand, very probably an iron or Titanian sand, which appears to me to be in

truth a sort of powdered lava: here and there were heaps of sea-weed, among which the *fucus-laceratus* seemed particularly to abound. Where the shore becomes somewhat higher, the cliffs are composed of horizontal strata of lava. The hills and mountains were covered with a charming carpet of grass, the sight of which rejoiced us so much the more, as the snow-clad summits of the mountains in Kamschatka and the Aleutian islands were still hovering before our eyes.

We had proceeded but a very little way from the shore, when we came to some earth huts, the principal supports of which, instead of timbers, were the rib-bones of whales. Here and there lay some household utensils, casks, skins that were spoiled, hides of seals, wood, and other things, which seemed to indicate the resort of man; but not any traces of an inhabitant were to be discovered: we presumed, therefore, that this island had been formerly visited by the inhabitants of St. George, but that at present it was entirely deserted. We soon quitted these forsaken habitations, and visited the north-eastern point of land, to observe more nearly a large collection of the sort of seal known by the name of sea-bears, *phoca ursina*, the noise and bellowing of which we could hear at a considerable distance. We armed ourselves, every one with a large stick or cudgel, of which we found plenty lying about the huts, and repaired to the combat.

This sight, wholly new to me, is scarcely to be described. These animals lay about in different heaps, old and young together, to the amount of several thousands. They did not betray any particular signs of fear as we approached; a great number

of them leaped over the rugged stones into the sea, but a still greater number, of the old ones as it appeared, remained on shore, as if to guard the young ones entrusted to their care. The largest and oldest of these defenceless creatures opened their mouths, and hissed at us as we fell upon them; others endeavoured, by biting, to defend themselves, and drive away the invaders.

The young ones, who were still sucking, bleated like sheep; the larger ones made a noise like calves. From many came a tone not unlike that of a person vomiting, others cried like little children; and although they endeavoured to defend themselves with open mouths, it required no great dexterity to seize them by the tail, and drag them away. Some of them were immediately sacrificed, and being cooked, were served up as an offering to appease our excessive hunger: in less than half an hour we had slaughtered between forty and fifty large ones to carry as a supply to our ship's crew: the sailors would have killed them by hundreds, if they had not been restrained by our positive commands.

These animals live in polygamy. The males sometimes contend with each other strenuously for possession of the females; the strongest among the males watch carefully over the females and the young. When any danger menaces, they seem to give, as it were, the word of command to the flock under their care to secure themselves, and remain as faithful guardians to meet and defy the enemy. If the males sometimes appear enraged, the females seem to endeavour to sooth and soften them, and if the females neglect or disobey the com-

mands of their lords, the latter punish their disobedience by biting them. But since it is no part of my plan to enter minutely into the natural history of these curious animals, I recommend the reader for farther information concerning them to G. M. Steller's description of remarkable sea-animals, published at Halle in the year 1753.

After amusing ourselves some hours with a scene so entirely new, and exploring the neighbouring country, we returned back to the huts, where we found a young sea-bear prepared and cooked for our dinner, the flavour of which we thought excellent, and on which we made an ample repast. The flesh of these animals is extremely good as long as they live only upon the mother's milk; the flavour is very much like that of veal, but the dark hue of it is not inviting; the webbed feet are particularly good.

Our hunger being better appeased than it had been for some time, in the afternoon we returned to the ship, carrying with us a rich booty of fresh provisions for our ill-fed crew. Here we found very unexpectedly a large leather canoe, or baidar, with several Russian fur-hunters, who had observed our ship from their habitations at the south-western point of the island. As the sea was calm, and the weather tolerably good, it was agreed not to remain at anchor any longer where we then were, but on the morrow to visit the establishment itself.

On the seventh, at day-break, we again went on shore, and found on the south-western side a spacious bay, with several well-constructed earth huts about a verst from the shore: they

were the habitations of fifteen Russians, and several Aleutians. Some of these people had lived here several years, occupying themselves with collecting sea-bears and foxes for the Russio-American Company. According to their own report, in the beginning of the summer they are almost entirely employed in laying up stores for the winter, which consist chiefly of the flesh of sea-bears dried; the latter part of the summer and the autumn is devoted to preparing and curing the skins. These fifteen men had this year killed no less than thirty thousand sea-bears for winter stores, the skins of which had all been thrown away, because, as they said, they could not spare the time to spread them out and dry them.

The islands of St. Paul and St. George were discovered in the year 1786 by a pilot of the name of Pribuloff, running from Oonalashka. The first, according to our observation, lies in latitude 57° 15′ north, longitude 170° west of Greenwich; it consists of several low hills and hillocks in the vallies, among which are many ponds filled with melted snow, which afford very good water for drinking. The island is between thirty and forty versts in length, and stretches from north-east to south-west; it is covered with grass and shrubs, but is totally destitute of bushes or trees.

The north point is a low projecting neck of land. A brittle, porous, and black lava, of which the steep cliffs on the southern coast consist, leads irresistibly to the idea that the island owes its origin to a volcano; perhaps by a longer abode the crater might be discovered. Impressed with these ideas, it was to me a circumstance well worthy of remark, when, upon inquir-

ing particularly for natural curiosities, I received from one of the Russian hunters established here some petrifactions, which he said came from the highest hill nearly in the centre of the island. This phenomenon appears so much the more striking, inasmuch as all the mountains from Kamschatka over the Aleutian islands to the north-west coast of America are composed entirely of original materials, as granite, porphyry, hard schistus, and volcanoes.

The climate is cold and ungenial, and it appears scarcely comprehensible how any persons, not natives of the country, can have resolved to fix their abode in so confined a spot, separated almost entirely from the rest of the world. According to the report of the inhabitants, the island is subject in winter and spring to frightful storms, when the surrounding sea is covered with vast rocks of ice; in summer it is subject to perpetual fogs. Some of these men, who, in the few clear days they enjoy, have ascended to the tops of the highest hills, assert that they can discern in the north-north-east an island which has never yet been observed or visited by navigators. Those who have lived twelve years at St. Paul, say that the climate evidently improves; that the degree of cold is not so great at present as when they first came, and that the number of plants and shrubs produced spontaneously by the earth is considerably increased.

The principal productions of the island consist, first, in stone, or ice-foxes, which are taken in fox-snares; formerly the number caught was very great, but it is now exceedingly diminished; secondly, in an immense number of sea-bears, called

by the Russians *kottibi*, which come here in the middle of April to bring forth their young, and depart again about September. They belong to the seal genus, but differ materially from the common sea-dog, *phoca vitulina*, in the fine furry nature of their skins; these are highly valued by the Chinese and other Tartar nations, particularly the Jakutians, Tungusians, Bureatians, and Baschkirs; they use them principally for bordering their garments and for head-dresses. The English and Americans, as I was assured, collect these animals from some of the islands in the South Sea, especially from the island of Amsterdam, and carry the skins to market at Canton under the English name of *fur-seals*. The Russio-American Company carry on a very advantageous trade in them; fifteen men, with an establishment which costs them next to nothing, can easily in the course of the summer collect and prepare a hundred thousand skins; each of these will fetch at Canton a Spanish dollar, or a dollar and a half, or at Kiachta from two to three roubles. Some years ago, as I was informed by a person deserving of credit, such a number were taken, that skins to the amount of some millions of roubles rotted in the warehouses of the Company, more anxiety having been shewn to collect a number than to attend to their being properly cured. The fat of the animal is generally thrown away, though excellent oil might be made from it.

The usual manner of taking the sea-bears is to get between them and the shore, and drive them by troops one or two versts into the interior of the island, where they are killed by the stroke of a club. This is done to avoid frightening those that remain about the shore.

The valuable sea-otters, *lutra marina*, nearly three thousand of which were taken in the first two years after the discovery of the island, each skin being worth from a hundred to a hundred and fifty roubles, are now almost extirpated; single ones only are casually taken, and that very rarely. Sea-dogs and sea-lions, *phoca vitulina* and *phoca jubata*, are collected in abundance. The sea-cow, *trichecus rosmarus*, is taken upon a small rocky island, called Morfchowa Ostrowa, lying some versts from the south-western point of St. Paul.

My curiosity was particularly directed to the *trichecus manatus Stelleri*, or Steller's sea-cow. This curious animal, of which we first received an account from the above-named votary of science, and which in former times abounded upon the coasts of Kamschatka, on Behring's, and other islands in these seas, when it was a favourite food of the Russian Promüschleniks, or fur-hunters, has not been seen now for some years; it has disappeared even from Tschuktschkoi-noss, the most northern point of the Asiatic continent in these parts. It seems, therefore, very probable, that though known to be in existence not more than forty years ago, it must now be ranked among the list of beings lost from the animal kingdom, like the dudu, the mammoth, the carnivorous elephant of the Ohio, and others*. Very few fish are to be seen here; they are frightened away by the sea-dogs, sea-lions, and sea-bears.

As well as being the resort of such immense troops of the

* In the German translation of Sauer's travels, it is asserted that the last animal of this species was killed at Behring's island in the year 1768, and that since that time it has never been seen in these parts.

last mentioned animals, this island, small and inconsiderable as it is, is the rendezvous of many millions of sea-birds, which assemble from every part of the widely-extended ocean between Asia and America to lay their eggs and hatch their young. The Russian fur-hunters profit exceedingly by this circumstance, and next to the flesh of the sea-bears, which, in summer fresh, and in winter dried, constitutes so essential an article of their subsistence, nothing affords them so great a supply of food as the eggs of these birds, and that for a very great part of the year. The whole hunting party is busied in spring for days, and even weeks, in the dangerous task of collecting them. They climb up the steep cliffs to the height of thirty or forty toises with baskets, and take the eggs from the nests: when a sufficient number is collected, they are washed quite clean, and dried in the air, then put into casks, and the vessels being filled up with oil carefully purified, they are put by for use. In this manner they are kept for the greatest part of the year, and eat as sweet and fresh as if they were newly laid *. The eggs of the *colymbus* or guillemot are preferred before all others, as the largest and best flavoured.

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* This may be very possible in so cold a climate, but I doubt much whether the same experiment would succeed in a warmer. It is, however, well known, that upon a similar principle, viz. through the exclusion of the air, fruit may be kept fresh for a long time, that is to say, in wax, butter, &c. &c. AUTHOR.

It is a very common practice in England to keep eggs stored up for the winter in lime-water, a cheaper medium for preserving them than oil, and operating in the same kind of way, viz. keeping them entirely excluded from the air; they should be put into a wooden or earthen vessel, and stand in a cool cellar. In this way they keep through the winter, so as to serve extremely well for most culinary purposes, though it cannot be said that they are as good as when first taken from the nest; they will not do very well to eat plain boiled, or poached. TRANSLATOR.

During our short stay, I observed the following birds among those that make their nests here. The *alca cirrhata*, or tufted auk; the *alca arctica*, or puffin; the *alca pygmæa*, or pygmy auk; *sterna hirundo*, or sea-swallow; several species of *larus*, or sea-mews, and *procellaria*, or peterels; and the *colymbus*, or guillemot: these were in immense numbers. I saw, besides, the *pelicanus urile*, and some others of the same genus. It would no doubt have been easy during a longer stay, and by a closer examination, to have found many other rare and curious objects.

Neither is this island poor in plants. Of eatable vegetables I saw *heracleum sibiricum*, or Siberian parsnip; *epilobium*, *artemisia absinthium*, or wormwood; *artemisia vulgaris*, *rumex*, or sorrel, wild celery, *pulmonaria maritima*, *veronica beccabunga*, *cardamina hirsuta*, or water-cresses; several sorts of berries, as *rubus arcticus* the bramble, *chamæmorus* the cloud-berry, and others. Of new and unknown plants I found species of the *androsace alopecurus*, *achillea*, *carex*, *drabæ*, *ligusticum*, *potentilla*, *polemonium*, *pedicularis*, *saxafraga*, *taraxacum*, and others.

The Chamberlain Von Resanoff, as plenipotentiary, occupied himself nearly the whole day with examining into the commercial concerns of the Russio-American Company. He inspected the stores of fox and sea-bear skins, of sea-cows' teeth, of whalebone, of sea-dog skins, and other articles, and found it necessary to lessen the number of fur-hunters, in order to restrain within some bounds the number of animals taken in the year, which was so great as to run the hazard of exceedingly diminishing the several breeds in future.

Who would not imagine that every individual among the hunters must have been eager to avail himself of such an opportunity of withdrawing from his situation, and have esteemed himself fortunate that the thing was possible? This was not, however, by any means the case; on the contrary, they fell at the chamberlain's feet to beg as a particular favour that they might be permitted to remain upon the island. "We have here," they said, "in abundance every thing that we want. Of the skins of foxes and sea-bears we make our clothing; the latter, which we consider as our flocks, afford us excellent food, and in the utmost plenty. Fruits of several sorts, that is to say, berries, are not wanting, nor is there any deficiency of wholesome plants, while for dainties we have the sea-birds and their eggs. Notwithstanding that the island is destitute of wood, we do not feel the want of it so sensibly as might be supposed; the earth huts we make are very warm, and wood from the wrecks of ships is often driven on shore; while bones with oil serve to light and warm us, as well as to cook our victuals."

Such a description would lead any one to suppose that these fifteen men, three or four of whom had married Aleutian women, lived in the utmost friendship and unanimity; but, alas! we could find nothing but discord and enmity among them. One of the hunters, who, as I was informed, had been formerly a merchant at Moscow, but was afterwards banished to Siberia as a fraudulent trader, and at length had begun to carry on a regular trade here, put himself at the head of his brethren, and remonstrated in a true oratorical style with the chamberlain upon the injustice and hardship of his proceedings; the conse-

quence of this was, that most or all of them were fetched away the same year. We carried off some of the party, as many as our ship would admit.

During the two days we remained here we regaled ourselves plentifully with the flesh of the sea-bears and birds' eggs, and rejoiced at the idea of having laid up ten or twelve days fresh provisions for our diseased and half-starved crew. It was indeed not a little striking to see the change that a few days of better feeding made in these miserable people. The scurvy very visibly decreased, and a vivacity and joviality hitherto unknown was observable among them. For five or six days the flesh of the sea-bears kept very well, and was perfectly good, but then it began to grow nauseous to us.

On the eighth we quitted St. Paul, and the same day arrived in sight of St. George, a considerably smaller island to the south-west of it. As it was known that a hunting party was established there also, the chief, Von Resanoff, thought it proper to inquire into the situation of it, and on the following morning we approached the south-western point of the land. When we were at the distance of about a sea-mile and a half, a cannon was fired to attract the observation of the inhabitants, and invite them to the vessel. At the same moment, while the echo of the fire resounded along the steep cliffs, an innumerable flight of birds of various kinds rose terrified all along the coast. Without any exaggeration, or seeking to exhibit an overcharged picture, I can assert, that literally a thick living cloud spread itself around, and that the sea, as far as our horizon reached, was absolutely blackened by the animals.

Almost at the same time a brisk wind sprung up, which rendered the neighbourhood of the rocky Island of St. George dangerous to us, and which also prevented the persons by whom it was inhabited venturing to the ship. We were therefore obliged to abandon the idea of becoming more nearly acquainted with it, and steered away to the south-east for Oonalashka.

On the fourteenth we came in sight of land, but a strong contrary wind precluded the possibility of our reaching the harbour of Illuluk, on the north-east side of the island, and we were obliged to encounter the dangerous passage between the islands of Akutan, Akun, and Awatanok. The proximity and number of the reefs of rocks, which were pointed out by the strong foam, the high wind, the heavy sailing of our vessel, and the rushing current of the sea, made our situation here somewhat formidable, and the activity and skill of our two officers, Lieutenants Schwostoff and Davidoff, were now of most essential service to us. By the evening we saw ourselves entirely out of danger, and on the afternoon of the sixteenth entered the bay distinguished by Sarytscheff, Captain Cook, and others, under the name of Sea-Otters Bay. We cast anchor in the little creek of Amagul, being then, according to an observation taken at noon, in latitude 53° 40′ north, longitude 166° west.

We had not been there long before we were visited by several Aleutians, who came in their leather canoes, made to hold only one person, called in the language of the country baidarkas. They informed us that we could go over the hills to the prin-

cipal settlement, which might be at the distance of between five and seven versts. An Aleutian was immediately dispatched as a messenger to inform the overseer belonging to the Russio-American Company, M. Lariwanoff, of our arrival.

As our chief, Von Resanoff, was particularly anxious to make himself acquainted with the situation of the settlement here, he, without hesitation, formed the resolution of proceeding thither instantly on foot: the two lieutenants and myself, with some sailors and guides, accompanied him. We went in our boat, followed by the Aleutians in their baidarkas, to the little creek of Ugadachan, whence our journey by land commenced. Some splendid flowers were in blow upon the shore, among which a new *mimulus* and a *potentilla*, which has never yet been described, were particularly to be distinguished: the low ground in the vallies was covered with grass.

The many new objects by which we were surrounded, the broken cliffs, the round snowy summits in the back ground, the steep declivities we were obliged to ascend, and the vallies into which we again descended, could not engage my attention so long as I wished, for the twilight began soon to come on, and the night closed in leaving us to find our way in the dark, conducted by our Aleutians, through an untracked country. Stones and cliffs, fox-holes and bushes, rendered our walk extremely fatiguing, and at length, when we were almost at the end of it, and our party thought they had happily discovered a foot-path, we found ourselves up to our knees in the midst of a stream. All our difficulties were however finally surmounted, and about twelve at night we arrived wearied and exhausted at Illuluk.

CHAPTER II.

Description of the Island of Oonalashka.—The Inhabitants.—Their Habitations.—Their Food, Clothing, and Ornaments.—Tattooing.—Occupations of the Men.—The Baidarkas or Canoes.—The Javelins.—The Whale Fishery.—Occupations of the Women.—Their Religion.—Marriages.—Amusements.—Productions of the Island.

The Island of Oonalashka stretches from north-east to south-west; it is from seventy to eighty versts in length, but of very unequal breadths. On the north and north-east side there are many bays and creeks, in some of which are very secure harbours for vessels. A part of the south-west shore consists of very high steep inaccessible cliffs, and another part has remained hitherto wholly unexplored.

Here, as in most of the Aleutian Islands, many considerable high rounded hills or peaks are observable; among them two volcanoes are particularly to be distinguished. At a distance the imagination is led involuntarily to conceive that the black and broken rocks which border the shore afford indisputable proofs of the island having received its origin from these volcanoes; I was therefore the more struck with finding in every part of it that I had the opportunity of visiting, granite and porphyry for the most part of a very fine grain, but no volcanic productions whatever.

The whole island consists of a mass of rocks covered only with a very thin coat of earth; the hills are of very unequal heights, and are intersected by irregular vallies; the soil of them is commonly argillaceous, or an earth which appears washed down from the hills. Here and there, even at a considerable heighth upon the hills, are to be found ponds formed from melted snow, which afford very sweet and good water. In the lower vallies there is great abundance of grass, which would furnish very good food for cattle. No kind of trees grow either on this or the neighbouring islands, only low bushes and shrubs of dwarf-birch, willow, and alder, with several sorts of berries, as *rubus*, *vaccinium*, *rhododendron*, and others.

The wood for building the earth huts, and for making the skeletons of the canoes, the oars, the javelins, and other purposes, is only obtained from the sea, and collected by the inhabitants along the coast. Large trunks of valuable trees from America and the islands of the South Sea, among others of the camphor-wood, probably from Japan, are often floated hither.

The inhabitants appear to be a sort of middle race between the Mongul Tartars and the North-Americans. They are of a middling stature, having in general strongly marked features, impressed with a great deal of character, and a pleasing benevolent expression of countenance. The colour of their skin is dark, a sort of dirty brown, to which perhaps their habits of life, and a great want of cleanliness, may very much contribute. They appear well-fed, and have full round faces, broad cheek bones, broad, flat, and compressed noses, thick, coarse, black hair, black eyes and eye-brows; the men have very little beard,

since they are careful to pluck it up by the roots as soon as it appears; in other parts of their bodies they have also less hair than the men of most other nations. The character of these people is generally kind-hearted and obliging, submissive and careful, but if roused to anger, they become rash and unthinking, even malevolent, and indifferent to all danger, nay, to death itself.

The habitations are holes dug in the earth, covered with a roof, over which earth is thrown; when they have stood for some time they become overgrown with grass, so that a village has the appearance of an European church-yard full of graves. Into these huts the inhabitants descend by the chimney, or hole whence the smoke issues out. To some of the largest which are inhabited by the Russians, a low door is made in the side. The light is admitted through a little opening or window covered over with seal's entrails or dried fish-skin. Several divisions are made within by means of seal-skins or straw-mats, which separate the domains and property of the different families that occupy the habitation.

The population of the country is at present very small; the exact number they appeared anxious to conceal, probably that we might not know to how very small a number it is reduced. The male population of Oonalashka and the surrounding islands, included under the name of the Fox or Andreanoff Islands, in fact, does not appear at present to amount to more than three hundred. In Schelikoff's time, that is from 1783 to 1787, it was as many or more thousands; in 1790 Sarytcheff reckoned it at thirteen hundred.

A leading cause of this rapid depopulation most probably is to be ascribed to the directors of the principal establishment of the Russio-American Company at Kodiak, being in the habit of sending the best hunters from hence to the Islands of St. George and St. Paul, to Kodiak, and even to the north-east Coast of America, to chase the large sea-otters; and it is very rarely that any of these people ever return to the bosoms of their families. It is extremely probable also that the oppression under which they live at home, the total want of care, and the change in their modes of living, contribute exceedingly towards diminishing the population.

The principal food of these islanders consists of fish, sea-dogs, and the flesh of whales. Among the fish the most common and most abundant are several sorts of salmon, cod, herrings, and holybutt *pleuronectes hippoglossus*. The holybutts, which are the sort held in the highest esteem, are sometimes of an enormous size, weighing even several hundred pounds; but the instances of this very great size it must be owned are extremely rare. When an Aleutian has the good fortune to hook one of these enormous fish, as it is impossible for it to be taken into their small leather canoes, they kill it in the water, and either cut it to pieces, and bring the pieces away at different times, or, if they can keep it hooked fast by the angle and line, tow it in this manner after the boat.

Next to fishing, their most important occupation is hunting the sea-dog, *phoca-vitulina*; this animal indeed forms such an essential article to the subsistence of the Aleutians in a variety of ways, that it may truly be said they would not know how to

live without it. Of its skin they make clothes, carpets, thongs, shoes, and many household utensils; nay, their canoes are made of a wooden skeleton with the skin of the sea-dog stretched over it. The flesh is eaten, and of the fat an oil is made, which, besides being used as an article of nourishment, serves to warm and light their huts. The Æsophagus is used for making breeches and boots, and the large blown-up paunch serves as a vessel for storing up liquors of all kinds. Of the entrails are made garments to defend them against rain, and they also serve instead of glass to admit light into the habitations; the bristles of the beard are used like ostrich feathers in Europe, as ornaments for the head: there is consequently no part of the animal that is not turned to some use. The fat of the whale is another favourite species of food among the Aleutians: these monsters are sometimes killed by them, but are more frequently thrown on shore by the sea. When this fat grows old and rancid, it serves equally with that of the sea-dog to light and warm the houses.

Vegetable food is either not much esteemed by them, or else they do not like the trouble of procuring it. That sweet plant, the Siberian parsnip, *heracleum sibiricum*, is but little eaten, any more than the bulb of the Saranna or Kamschadale lily; the latter I found much bitterer here than at Kamschatka, perhaps owing to the difference of the soil. Berries of an eatable quality abound; of these, I can enumerate the following as having come under my own knowledge; *rubus idæus*, the rasberry, *rubus arcticus*, the dwarf bramble, *rubus chamæmorus*, the cloud-berry, *vaccinium vitis idæa*, the red bilberry, *vaccinium ugilinosum*, the great bilberry, *vaccinium oxycoccos*, the cranberry, *vaccinium myrtillus*,

the whortle-berry, *viburnum opulus*, the guelder-rose. These, as well as many sorts of roots, are collected, when they are ripe, by the women and children, and laid up for winter stores. In latter years the Russians have begun to plant potatoes, which succeed extremely well, and are much liked by the people.

Wild-geese and ducks come in such abundance in spring and autumn, that a large quantity of them are salted and smoked for winter food;* but the Aleutians appear to prefer the fat of the sea-dog or whale very much to a salted and smoked goose. Some of the neighbouring rocks serve as the rendezvous of a great number of sea-fowl of the *Colymbus*, *Larus*, *Alca*, and *Pelecanus* species, with many others. The eggs of these birds are collected, as in the Island of St. Paul, and preserved in the same way for winter stores.

Attempts have been made to breed hogs at Oonalashka; for want of other food they have been fed with fish, but the fat by this means becomes thin and oily, and the flesh contracts a disagreeable fishy flavour. The introduction of cattle it should seem would be very possible, and would be attended with great advantages to the Russian settlers. A cow which was brought from Kodiak grazed here luxuriantly for several years, but was then lost among the mountains, as she was left to run loose, without any precaution, for the greater part of the year. Some hens, the property of M. Von Lariwanoff, the superintendent of the Russio-American Factory, were, for want of corn,

* Salt is extracted in small quantities by the Aleutians from sea-water: in the process of making it, the bones of sea-dogs or whales, impregnated with oil, are used instead of wood.

fed chiefly upon dried fish cut into small pieces, crumbled as it were; but this kind of food did not appear to suit them: it made the flesh flabby, spungy, and disagreeable both to the eye and taste, and the fat, besides being as yellow as a lemon, was thin and oily.

M. Lariwanoff assured us that during the five years he had been upon the island he had scarcely ever tasted bread. Some time before he had procured six or eight *pud** of meal from Ochotsk, but he only now and then, upon extraordinary occasions, made bread or pastry with it.

The cloathing of the men and women is nearly the same, and consists commonly of a sort of carter's frock, or shirt, fastened round the neck with a broad stiff collar. These garments are made of the skins of sea-dogs or several sorts of birds, particularly of the sea-parrots, as they are called, the *alca cirrhata* and *alca arctica*, and the sea-raven, *pelecanus urile*; they are prepared in a manner peculiar to themselves, and sewed together very ingeniously. Though simple in their form, they are ornamented in a variety of ways, either with glass-beads, with the beaks of the sea-parrots, or with long strips of sea-dog and sea-otter skins. The seams are often ornamented with stripes of thin leather ingeniously worked, or dyed of gaudy colours. Long white goat's hair, which is brought from Siberia hither as an article of trade, or small red feathers, are also interwoven into the seams. These feather garments, on which a person is sometimes employed a whole year before they are completed, appear

* A *pud* is a weight of about forty pounds.

to me wrought with an ingenuity and industry which would not shame an European artist; they are called *parka*, and are worn sometimes with one side outwards sometimes with the other. In times of rain the feathers are turned outwards; but in cold and dry weather they are turned inwards, instead of fur. The leather-breeches, made of the æsophagus of the sea-dog, are used by the men principally for fishing, and are found water-proof. A few have of late years begun to wear a shirt, made of a coarse cotton cloth from China, or of sail-cloth, which they procure from the Russio-American Company.

When the men are on shore they commonly wear boots, the soles of which are made of the sea-dog skin, and the upper part of the æsophagus of the same animal: the leather is cured in such a manner, that the people go about in bogs and marshes all day without their feet being the least wetted; the boots are however taken off when they get into their boats. The tendons of whales or rein-deer are used for thread; they have this resemblance to our catgut strings, that when exposed to the water they swell out, and render the seams impenetrable to it.

To a nation which depends so much upon the sea for its sustenance, and which is situated in such a damp and rainy climate, the possession of a sort of cloathing which shall be proof against water is a point of the utmost importance. Necessity is the great mother of all invention, and to her these islanders are most probably indebted for their *kamleika* or rain-garment. This is made of the entrails of the sea-dog, which in quality have a great resemblance to bladders; they are only three inches broad, but are sewed together

with so much ingenuity, that, though ornamented with goat's hair or small feathers, the water never penetrates through the seams. At the back part of the collar is a cape or hood, which in a heavy rain or storm is drawn over the head, and tied fast under the chin; the sleeve is fastened close round the wrist. Thus clothed, any one may be out for a whole day in the heaviest rain, without finding any inconvenience, or being wetted in the slightest degree.

The most elegant and most expensive head-dress is a sort of wooden hat, which in front comes out before the eyes like a sort of umbrella, and is rounded off behind. When it is recollected that all the Fox Islands are destitute of trees, and that consequently the inhabitants depend for timber for their houses and the skeletons of their boats on what the sea brings by chance to their coasts, that such a hat is a costly article of dress will be easily comprehended; and it will also appear how much even the most uncultivated among mankind value things according to their rarity, and how entirely costliness is a relative idea.

These people, who but seldom get a piece of good wood of some inches in circumference, are frequently occupied a whole week in forming it into a plank, and working it, so that it may be rendered pliable by lying in the water. When this is done, they endeavour by degrees to draw the two ends of the plank towards each other, and to fasten them together with the tendon threads, so as to form a pyramidal shaped hat. If they succeed in this, which is not always the case, they then proceed to paint it with earth and ochre, which they procure from the

distant volcanoes, and ornament it with ivory figures carved from the teeth of the sea-cow, with glass or amber-beads, which are procured from the Russians, or with the bristles from the beard of the sea-lion. These bristles are considered by the Aleutians as of very great value, probably because they may be regarded as trophies which indicate a good hunter, since each animal has only four bristles, consequently any number of them together must be a testimony of having captured a great many. I have in my possession a hat which must be ornamented with the beards of at least thirty-seven sea-lions, and which would be worth eighty roubles at Oonalashka, reckoning by European money.

The women for the most part go barefooted; they wear bracelets of glass beads just above the wrist and ankle-joints, and are very fond of rings upon their fingers. The thick coarse hair of the men is left commonly hanging lank and wild about the head; the women comb the hair of the front half of the head over the forehead, and cut it off in a strait line directly above the eyes, tying it up together behind in one large bunch.

A mode of ornament which appears very strange to us Europeans, and which indeed daily decreases in use among these islanders, is the boring the under lip a little below the mouth, and sticking various objects through the slits so made: a common sort of ornament is made of glass beads somewhat after the manner of our buckles. They also bore the nostrils, and stick little pieces of wood, about the thickness of a small quill, through, without any other decoration. On solemn occasions, only at dances and festivals, they fasten strings of

glass beads to the ends of these pieces of wood, which hang over the mouth in such a manner as to be very inconvenient in eating. Our European ladies make only one hole in the ear, from which some kind of costly ornament is suspended, but the ears of the Aleutian ladies are pierced with holes all round, to which glass beads are fastened. A long string of beads is hung to the lower part of the ear, which sometimes falls down even to the shoulder or breast, and round the neck is often worn a stiff collar of leather, over which are sewn several rows of glass beads.

Of all the ornaments used for the ears, nose, lips, neck, arms, and feet, none are so highly esteemed as a sort of long muscle, commonly called sea-teeth, the *dentalium entalis* of Linnæus. Formerly, when the inhabitants lived in affluence, these tube-like formed shells were so much sought after, that any one would willingly give three or four sea-otter skins, that is, the value of a hundred roubles, for a small string of them: at present they are satisfied when they have merely clothing sufficient to protect them from the cold and wet; they can no longer think of luxuries and superfluities.

Tattooing was at one time very much in use among them, particularly among the women. The neck, arms, and chin, were punctured, and a sort of coal-dust mixed with urine rubbed in: at present these ornaments are rare, and chiefly to be seen among the old women: the Russians have made the young women understand that they do not consider their beauty as increased by them, and this has rather brought them into disrepute. It is remarkable, that while the men seem anxious to

get rid of their beards entirely, plucking up the hairs by the roots, the women, as a matter of ornament, have made themselves a sort of artificial beard; for the tattooed chins give them at a little distance the appearance of having bluish beards.

As the principal means of nourishment among the Aleutians are derived from hunting and fishing, so an essential part of their occupations must be to prepare the implements necessary for both. Their time is accordingly no less devoted to making their canoes and oars, their spears, javelins, fishing-lines and hooks, than to the employment of these things when made. The fabricating a sort of little drums, of rattles composed of the beaks of birds, of ornaments, wooden hats, wooden dishes and vessels with figures carved upon them, little models of their canoes, &c. &c. are only what may be called the amusements of their leisure hours.

The baidarkas of the Aleutians in their principal characters resemble those of the Greenlanders and Eskimaux: they consist of a skeleton of wood, over which is stretched a leather covering made of the skins of sea-dogs. In their form they are long and narrow, and commonly hold only one person; sometimes they are made to hold two, and very rarely three; each person sits in a round hole just fitted to the size of the body. It requires a good deal of dexterity to manage such canoes, but experienced navigators will venture out a considerable way to sea in them, even in very stormy weather. Scarcely has a boy attained his eighth year, or even sometimes not more than his sixth, when he is instructed in the management of the canoes, and in aiming at a mark with the water javelin. An

old chief of Oonalashka, whose confidence I had gained very much, informed me that the making and managing their baidarkas is a principal object of emulation among them. This chief made me particularly examine some of the best constructed of them, and I availed myself of the opportunity to measure them exactly, and investigate minutely the mode of their construction, a secret known, comparatively speaking, to very few islanders.

The length of a one-seated baidarka is about eighteen feet, the breadth nearly two feet, and the heighth about one and a half. The keel consists commonly of three pieces of wood joined together, the foremost of which is five feet long, the hindermost three and a half. All the long and cross-bars which form the skeleton are fastened together either with fish-bones, or the tendons of sea-dogs, and the whole canoe, the hole excepted in which the man sits, is covered with the leather, which is stretched tight over it. In some places, where the different pieces of the skeleton are fastened together, two flat bones are bound cross-ways over the joint in the inside, and this the chief assured me was of the greatest use in stormy weather. As the fastenings are apt to be loosened by the shock of the waves, these bones contribute essentially towards preventing such an inconvenience; but this art is not known to all, and is kept very much a secret by those who possess it.

A good new-made and well-oiled leather canoe in fair and calm weather, or with a moderate wind, may remain constantly in the water twelve or fourteen days, without being injured, but if the weather be stormy, not more than six days at the

utmost, as the seams of the leather are apt to give way, and let in the water. To keep the baidarkas in good condition, they should be drawn out of the water after every voyage, and laid to dry upon the shore. If a rent be made in the leather by striking upon a rock, or any other accident, it is stopped with a piece of flesh of sea-dog, or fat of whale, of which the Aleutians always carry a provision with them, in case of such an emergency, and it is the best way of stopping the leak: it is, besides, considered as a piece of prudent foresight always to take some needles with tendon-thread upon every voyage, in case of their being wanted. The Aleutians often run out to sea even to a considerable distance upon their hunting parties, and then commonly several go together in company, always carrying with them their kamleika, or rain garment. If a heavy storm comes on, they bind two or three of the baidarkas together, and then have nothing to fear. The hole in which the person sits has a piece of leather attached to it, which, on getting into the boat, he ties close round his body, so that it is impossible for any water to get into the interior of the boat.

In my opinion, these baidarkas are the best means yet discovered by mankind to go from place to place, either upon the deepest or the shallowest water, in the quickest, easiest, and safest manner possible. I do not speak here of great voyages, though the Aleutians will go in them from Kodiak to Sitcha, that is, from latitude 57°, longitude 152°, to latitude 56°, longitude 135°.

Besides these baidarkas, with one, two, or three seats, the Aleutians make a sort of large open leather boat, called a bai-

dar, which will hold fifteen or twenty persons. These boats were formerly the common property of a whole village, but they are now all in the possession of the Russio-American Company, and are used by them in their ordinary business; as, for example, for towing trunks of trees on shore, for carrying goods to and from their ships at their arrival or departure, or for towing home a whale, when one has been killed.

The men make the wooden skeletons of the boats, and prepare the skins with which they are to be covered; the latter are sewed together by the women. The arrows, or rather javelins, with which they make war upon the whales, sea-otters, sea-dogs, and birds, are also made by the men, and are of different forms and sizes, according to the objects against which they are to be directed. The most remarkable thing is, that they are not shot from a bow, but slung from a little plank, nor are they pointed with a quill.

The planks from which they are thrown are about eighteen inches long and two inches broad; and in order that the weapon may be held the faster, they have a sort of handle at the lower end, and an opening through which the fore-finger is thrust. At the other end is a small channel, into which the javelin fits with a little knob, which serves to retain it. When the javelin is to be thrown, the plank is held horizontally, and the aim being taken, the weapon is directed with the middle finger and thumb: this is done with so much dexterity, and the motion given to it is so powerful and so rapid, that the object at which it is aimed is rarely missed; even whales are killed without any other weapon. The javelins designed for sea-otters, sea-dogs,

sea-lions, and birds, are only pointed with bone; but for whales, they are pointed with *scoriæ of lava*, or *silex obsidianus*.

When the Aleutians see a whale they follow him in their boats, watching for the moment when he raises his gigantic head above the water to breathe, and then endeavour to wound him with their javelins near the front fin. If this is done effectually, the creature begins to writhe and rage furiously, till by degrees he grows faint and exhausted with the loss of blood. The Aleutian then returns perpetually during the day to the same spot, to watch for the monster floating dead upon the surface of the water; or if a strong wind blows towards land, he watches along the neighbouring coast for his being blown thither, and then collects the whole village together, to draw him on to their dwellings, where he is cut up.

The point of the javelin, which is commonly found in the wound that occasioned the death of the animal, is a testimony to whom the fish of right belongs; for every Aleutian has some peculiar mark by which his weapons are distinguished from those of his neighbour's. Formerly, according to the laws of the country, when a whale was taken, the chief of the village, the person by whom it was killed, and every individual of the society, had his regular portion assigned to him; but at present the Russio-American Company claim a half for themselves, and leave the Aleutians to settle the division of the rest as well as they can. The fins, the fat, the tongue, the jaw-bones, the entrails, the tendons, and some of the bones, are the parts of a whale that are of value; the flesh, properly so called, is of no use, and is thrown away.

Many Aleutians employ themselves, in their leisure hours, with cutting out from the teeth of the sea-cow little figures of men, fish, sea-otters, sea-dogs, sea-cows, birds, and other objects, which they do in a manner that appears very extraordinary, considering that the sea-cow's teeth are much harder than ivory, and that they have no proper tools to work with. It was formerly supposed that these figures were objects of religion, but they are clearly not so.

The women and girls are employed in summer in cleaning fish, and hanging them up to dry, and in collecting berries and roots for winter stores. They also sew the skins together, for covering the baidarkas, make clothes, boots, and shoes, draw thread from the nerves and tendons of the whales and reindeer, make slings for the javelins, and hooks for angling. In all their different kinds of sewing work, they display prodigious dexterity: the mode of sewing is very different for different objects. The rain garments, made of the entrails of sea-dogs, for instance, must be sewed in a very different way from the garments of birds' skins: another sort of work is necessary for sewing together the skins that cover the baidars and baidarkas; and still another for making the boots. At their leisure hours, particularly in long winter evenings, the women make fine mats, little baskets, and pocket-books, of straw, which are woven together with so much regularity, and in such symmetrical figures, that they might be supposed the work of very skilful European artists.

Though these people, therefore, must in general be allowed to be little cultivated, some taste for the beautiful cannot be

denied them. They besides dye straw, leather, and other objects for ornaments, with very fine and gay colours, using, for want of better materials, urine mixed with a variety of different things, according to the colour wanted: they also use urine with a very good effect for many other purposes, particularly in washing, as a substitute for soap-lees.

Their religion consists, like that of most uncivilized nations, in superstition and a belief in charms. Many of them have been baptized, and are nominally professors of the Russio-Greek faith, of which, however, they understand nothing more than making the sign of the cross. There is no such thing among them as an ecclesiastic, or a house of prayer; and the small number of Christians established here, have, in general, given such very indifferent specimens of the morality of the nation to which they belong, that the natives can hardly have any great belief in the benevolent influence which they are told the Christian religion has over mankind.

They have no marriage ceremony: the marriage consists solely in an agreement between the parties to live together as man and wife. The number of wives depends entirely upon the pleasure of the husband, and he commonly chooses to have as many as he can conveniently maintain. If his means decrease, he sends first one, then another back to their parents; and these women become perfectly at liberty to seek out other husbands. Sometimes the same woman lives with two husbands, who agree among themselves upon the conditions on which they are to share her; and it is not uncommon for men to make an exchange of wives. Boys, if they happen to be very handsome, are often brought

up entirely in the manner of girls, and instructed in all the arts women use to please men: their beards are carefully plucked out as soon as they begin to appear, and their chins tattooed like those of the women: they wear ornaments of glass beads upon their legs and arms, bind and cut their hair in the same manner as the women, and supply their places with the men as concubines. This shocking, unnatural, and immoral practice, has obtained here even from the remotest times; nor have any measures hitherto been taken to repress and restrain it: such men are known under the name of Schopans.

The bodies of the dead, especially the men, were formerly interred in places set apart for the purpose, and with particular ceremonies: their best javelins and clothes, with a portion of train-oil, and other articles of food, were laid with them in the grave; and, sometimes, even slaves of both sexes were slaughtered upon the occasion. These customs are now, however, entirely laid aside.

The Aleutians are not addicted to smoking, but are passionately fond of snuff. They will work for a whole day at the hardest labour, to get a single leaf of tobacco as their wages, and when obtained, they prepare it for use by grinding it to powder in a mortar made of the bones of whales, mixing it with ashes and water. Brandy is here very scarce, so that the misuse of it is necessarily rare; but the people are very anxious to procure it whenever a ship arrives from Ochotsk or Kamschatka.

Dancing is one of the most favourite amusements of the country, and during our stay a dancing festival was given by

Household Utensils &c from Alaksa, Oonalashka and Kodiak.

Published March 5 1814 by Henry Colburn, Conduit Street, London.

the superintendent of the Russio-American Company. The dancers of both sexes assembled in the open air dressed in their best clothes, with richly ornamented head-dresses, such as are only used upon like solemnities. The music consisted in a little drum, which beat the measure, and was accompanied with singing, and with a rattle made of the bladder of a sea-dog filled with pease or small pebbles. The only motion of the few persons who danced at the same time consisted in a sort of hop, the performer scarcely moving from the place he had first taken. When one of the dancers was tired he withdrew, and another stepped forward immediately into his place. If any one wished to dance who had not a proper garment for the occasion, he borrowed one, with the head-dress, from one of the party who had retired, and threw it in presence of all the spectators over his usual clothes. There seemed no particular exertion of strength, and no expression in this simple dance, yet the movement was of a nature that evidently soon exhausted the dancers. The masks, which earlier travellers observed these people to wear at their festivals, seem now entirely laid aside.

Our stay was too short to admit of our examining with great accuracy an island in many points of view so well deserving of examination. The furs are the primary source of riches to the country, and it is well known that these were the objects which first induced the Russians to form a settlement upon it. The black and silver-grey fox, the river and marsh-otter, are the skins principally collected: the valuable sea-otters, which were formerly taken in such abundance that in one voyage several thousands might be obtained, are now so much diminished in numbers, that scarcely more than between two and three

hundred can be procured annually. Birds of passage, with sea and marsh birds, are to be found in great abundance, and it is very probable that in a longer stay, and with a more accurate investigation, many new species of birds and fishes, as well as other marine productions, might be discovered.

Merely in the neighbourhood of Illuluk, and in the route from Sea-otter Bay to that place, I found the following plants, some of which were of the common species, some entirely new.

Achillea.
Aira grandiflora.
Andromeda, a new species.
Anemone narcissiflora, Linnæus.
Arnica, a new species.
Artemisia, a new species.
Aster, a new species.
Arbutus Uva Ursi.
Bartsia, a new species.
Campanula.
Cornus Canadensis.
Cerastium.
Claytonia, a new species.
Carex, a new species.
Empetrum nigrum.
Erysimum.
Epilobium.
Galium.
Geranium.
Geum rotundifolium, a new species.
Holcus borealis.
Hieracium.
Iris.
Isopyrum, a new species.
Lycopodium Alpinum.
Linnæa borealis.
Lilium Kamschatikum.
Lupinus nutkaiensis.
Lathyrus.
Mimulus, a new species.
Polypodium vulgaris.
Phleum ruthenicum.
Polygonum, a new species.
Plantago.
Primula saxifragæfolium, a new species.
Pedicularis, a new species.
Pulmonaria.

Pinguicula.
Pyrola, a new species.
Pyrola rotundifolia.
Potentilla pulchra, a new species.
Potentilla, a new species.
Rhododendron Kamschaticum.
Rubus.
Salices, a new species.
Solidago.
Saxifraga, a new species.
Sanguisorba.
Vaccinium.
Veronica.
Viola, a new species.
&c. &c. &c. *

* Many striking, and in several respects very interesting, observations upon this island, will be found in several places in *Sarytcheff's eight years' Travels*, particularly from page 151 to 171 of the Leipsick edition.

CHAPTER III.

Departure from Oonalashka and Voyage to Kodiak.—Description of the Latter Island.—Its Natural History.—The Inhabitants.—Their Manners and Customs.—Their Religion.—Situation of the Russian Settlement.—Productions.—Changes during our Stay.—Departure from Kodiak and Arrival in Norfolk-Sound.

On the twenty-first of July we quitted the settlement at Illuluk, after taking leave of the Director Lariwanoff and his wife and daughter, by whom we had been most hospitably entertained. We pursued the same route over land to Sea-Otter Bay, and as it was made now entirely by day, we could survey the country round much better than on our arrival. It is in some parts really picturesque. In many places we found by the side of the track, for road it can hardly be called, so imperfectly is it beaten, large stone-heaps of granite and porphyry, which serve as guides to indicate the route; these, on account of the darkness when we passed that way before, were not to be distinguished. Madame Lariwanoff had given us a small cask full of berries, a salted and smoked goose, a pasty of fish, and a lean ham, the best however among her stores, as a little provision for our voyage: all these were carried by the sailors and Aleutians on board the ship; the latter served us also as guides. I scarcely saw any land birds the whole way, and excepting a *scarabeus* of an unknown species, which I also saw

afterwards in Siberia, not a single insect. We reached the ship before the evening closed in.

A change was now made in the half-starved miserable crew that we had brought with us from Kamschatka: those who were the most afflicted with the scurvy and unable to work were left behind, and their places were supplied by some of the healthiest young men from the settlement. Our commander, Lieutenant Maschin, had been attentive to procuring fresh provisions for the crew, and all the chiefs of the country round had received orders to bring as much fresh fish on board as time and circumstances would permit. Not far from the anchoring-place very good water was found, but it was by no means possible to procure firewood; fortunately, however, we had had the precaution to bring a stock with us from Kamschatka.

On the following day we sailed from Sea-Otter Bay, but had scarcely cleared it, and reached the neighbourhood of Ugalchan, or Jaitschnoi, that is to say *Egg-island*, so called from the number of sea-fowl that come there to make their nests, than a strong east-wind sprang up, which rendered it impossible to gain the open sea. We were therefore compelled rather to run into the harbour of Illuluk, than to venture ourselves with a very bad sailing vessel, perhaps for several days, among rocky islands, the sport of the winds and waves. We succeeded perfectly in the execution of our purpose by the assistance of Sarytcheff's excellent charts; through them we were enabled, in a very dark night, between the twenty-second and twenty-third, to run into the harbour. Here we remained till the twenty-fifth, when the wind becoming favourable, we were again enabled to put to sea.

The current of the sea, and the ebb and flow, are very strong and irregular among these numerous islands, and deserve the particular attention of every seaman.

On the twenty-fifth we finally quitted the coast of Oonalashka, and passed the nearest islands to the east, those of Akutan, Awatanok, Tigaida, Ugamok, and Botinski. On the twenty-seventh we came in sight of the Schumachin Islands to the north. This group was discovered in 1741 by Captains Behring and Tschirikoff, and was called after a sailor of the name of Schumachin, who was buried on one of them: it consists of thirteen or fourteen, and stretches from about the fifty-fifth degree of northern latitude, and one hundred and sixty-first of western longitude, to the neighbourhood of the peninsula of Alaksa. The principal of them are Unga, Nagai, Schumachinskaia, Tankinak, and Nunak.

The following afternoon, in latitude 55° 40′, longitude 202°, we saw a very dangerous insulated rock, and soon after discerned the Island of Ukamok in the south-east: this belongs to a group called by the Russians the Ewdokijefftian Islands. To the same group belong Semida, Achaiak, Sutchum, and several other smaller islands, stretching more to the north-west along the coast of Alaksa. A south-west wind, which had continued for some days, now became so strong, that towards evening, driven by that and the waves, we perceived ourselves in danger of being driven upon Ukamok, and the whole group was passed by necessity at a very little distance to the south-east of this black rocky island; a situation of no small danger to us.

Almost all these islands lying to the south of Alaksa are not inhabited by human beings, but are the resort of immense numbers of sea-dogs, sea-lions, and sea-fowl of various kinds: they are visited occasionally by hunting parties from Oonalashka, Unimak, Alaksa, Kodiak, and other islands. Sannak, or Isannak, alone is regularly inhabited by some Aleutians, who, upon the whole, as I was repeatedly assured, lead happier lives than most of these people, as they are not so much under the immediate influence of the Russio-American Company, and consequently are less frequently visited by the Promüschleniks.* This island lies between the fifty-fourth and fifty-fifth degrees of northern latitude, and about the hundred and sixtieth of western longitude, to the south-east of the straits of the same name, which separate the island of Unimak from the peninsula of Alaksa: it is about twelve sea-miles in length. The entrance to the Straits of Isannak may be known by the little island of Ikatok, or Ikatak, lying to the south of it.

We continued our voyage under an almost constantly favourable wind, so that early on the twenty-ninth we came in sight of two small islands, Sitchinak, and Tuchidok,† to the south-west of Kodiak, and separated from it only by a very narrow channel: soon after the island of Kodiak itself appeared in

* Promüschleniks is the name given by the Russians to the people employed in collecting the furs.

† I will not answer for the right orthography and pronunciation of the names of these and a number of other islands. Almost every individual hears differently. Admiral Sarytscheff writes the names of these islands as above. In a Russian map I find them put down as Tugijak, and Sitkinak; and Sauer in his Travels calls them Tugedak, and Siktunak.

view. Towards noon we passed the island of Sadlidok, or Schachlitak, which is in the neighbourhood of the factory established upon the island of Kodiak, by a merchant of the name of Schelikoff, a description of which is given by Billings, Sarytcheff, and Sauer. In later times, this establishment has been transferred to the north-east coast of the island, and we therefore steered for the point, called by Behring Cape Hermogenes; by Captain Cook, Cape Greville. This promontory is bounded to the north by two small islands, one of which, in the language of the country, is called Giniak, the other Ugak. On the thirty-first, after passing to the north of it, we arrived in a spacious bay, scattered over with a number of islands and single rocks, among which we cast anchor, not far from the principal factory of the Russio-American Company.

The present superintendent of the factory, a Dane, by name Bander, as soon as he was informed of our arrival, came on board to pay his respects to the Chamberlain Von Resanoff. From him the latter now learnt that M. Von Baranoff, the proper director and superintendent of all the Company's concerns, as well in the Aleutian Islands as on the north-west coast of America, was not then at Kodiak: some years before he had removed to Sitcha (the Norfolk-Sound of the English), where, as he was establishing a new factory, his presence was particularly required. We also learnt that Captain Lisiansky, with the Neva, had wintered at Kodiak, and sailed early in the spring for Sitcha, to assist M. Von Baranoff in his undertaking.

We now all descended into the boat, and as we approached

a fortress by which the factory is defended, the Plenipotentiary of the Russio-American Company was saluted with a repeated discharge of artillery, and welcomed with three cheers from between twenty and thirty youths, uniformly dressed, who had ranged themselves along the palisade. At the landing-place the Chamberlain was received by three Russian ecclesiastics, accompanied by the same youths, and conducted by them, the bells ringing all the way, to the church: here a public thanksgiving was offered up by the whole party for the happy arrival of so distinguished a personage.

A scene so unexpected made a forcible impression upon my mind, which had begun to be considerably depressed with the objects and occurrences I had for some time daily witnessed. It was a singular mixture of feeling, combining repentance, hope, and thankfulness for having thus far performed my journey in safety. I had now, in several instances, had occasion to observe, as well during our voyage, as in the course of our stay at St. Paul and Oonalashka, that though at Kamschatka large promises were made me, both in writing and orally, as to what should be done for the promotion of scientific undertakings, no alacrity had been shewn in fulfilling these promises, so that I began almost to repent having undertaken the voyage. At the same time, I could not but be struck with seeing how much it is in the power of one man alone to do for the good of his fellow-creatures, when he thoroughly understands the nature of the office entrusted to him, and is disposed to use his power to worthy purposes. Since our departure from Kamschatka my mind had been very much overcome by the manner in which I saw the lives of the Promüschleniks sported with.

I had suffered from the change of food, from constraint and baffled hopes, and above all, I felt such repugnance to the scenes of horror which seemed to be in store for me, that I had almost resolved to shut myself up in my chamber, lest by communication I should come at last to be like those by whom I was principally surrounded. In Captain Krusenstern, and the other companions of our voyage on board the Nadeschda, I had been accustomed to the society of upright and enlightened friends, whose integrity seemed to prepare for me the happiest prospects with respect to the future.

After the service in the church was over, M. Bander invited us to his house, where the good cheer set before us almost made us forget that we were now at the mouth of Cook's River, as it is called. A delicious soup, good beef, pulse, excellent fish, and pastry, sweetmeats, fruits, and several other European dishes, to which we had long been wholly unaccustomed, filled us with astonishment, and displayed to us in stronger colours than we had ever before witnessed the great value of so excellent a wife and housewife as we found in Madame Bander.

In the afternoon we went out to take a survey of the country, and the establishment, under M. Bander's care. A very neat house, which Captain Lisiansky had employed his sailors in building the year before, was allotted to the Chamberlain; the rest of us could only be accommodated with each a very small and poor apartment.

Kodiak, Kadjak, or Kuktak, that is to say, the Great-Island, is the largest of all the islands that lie to the north, between America and Asia. Including the small surrounding islands, it

stretches from latitude 56° 45′ north, longitude 151° 30′ west, to latitude 58° 35′, longitude 153° 30′. It has been known to the Russians ever since the year 1750. Many speculative merchants from Ochotsk had visited the island for the sake of collecting furs, between the years 1760 and 1770, till at length Gregory Schelikoff, a merchant of Irkutsk, thought of establishing a Russian factory here.

By degrees he reduced under his power this and the neighbouring islands, the population of which he estimated at fifty thousand persons; and embarking a very considerable property in the undertaking, laid the foundation of the present imperial Russio-American trading Company. If it be allowed that Schelikoff had from ostentation doubled the number of the inhabitants, the population still, at that time, must have amounted to between twenty and twenty-five thousand souls. So large a population, the quantity of valuable furs to be procured, the situation and nature of the country, a not very inhospitable climate, and several good harbours, naturally occasioned this island to be preferred before any of the others, as the seat of the principal establishment. The fire-arms of the new guests were too powerful to be resisted, the almost defenceless natives were soon subdued, and deprived of their property and possessions; and ever since, their numbers have from year to year constantly decreased.

According to the Director Delaroff, in 1790 the number of inhabitants in the islands of Kodiak, Appoknak, Sachlidok, Schujck, Tuckidok, and Sichtunok, amounted to three thousand souls. According to the present superintendent, Von

Baranoff, and M. Bander, the overseer at Kodiak, there are at present on the latter island only four hundred and fifty men capable of labour. The Lieutenant of the Navy, Hagemeister, who was at Kodiak in the year 1809, and asserts that he saw the list of the population of the islands among the papers of the Company, says, that the inhabitants of that island alone amounted to seven thousand souls. It appears to me, however, very strange, that the Steward of the Company should give in to the Chamberlain, Von Resanoff, a smaller number than really existed; for he certainly could not wish to represent the population of the country to this man, who was so anxiously inquiring into the state of every thing relative to it, under a diminished point of view. From this circumstance, and from the observations I had myself the opportunity of making, I am inclined to believe that the utmost number of men capable of working or hunting is at present not more than five hundred. It is very probable that the list seen by Lieutenant Hagemeister was one purposely exaggerated by the Company; and this idea is strengthened by a list of the population of these islands, at the office of the Directors at Petersburgh, which gives, as the population of the whole group, males and females included, in the year 1795, six thousand five hundred and nineteen souls; and in the year 1804, only four thousand eight hundred and thirty-four.

But even supposing the number given by Lieutenant Von Hagemeister to be correct, what is become of the rest of the fifty thousand found here by Schelikoff, in 1784; or of the twenty-five thousand, if we suppose him to have doubled them? Entirely different modes of life, foreign customs and manners,

the spreading of unusual, and in some cases of wholly unknown diseases, oppression, and ill-usage, in various ways, particularly compulsory and fatiguing hunting-parties, cares and sorrows, insurrections, and many other circumstances of a similar kind, have, like a pestilence, depopulated the countries to an almost incredible degree. As the same ruinous influence still subsists, the small remains of these people seem to be threatened with total extirpation.

The highest hills consist chiefly of granite, covered with a very thin layer of soil; the lower hills and the cliffs upon the coast are a hard schistus. The island is surrounded with bays, harbours, and deep creeks, some of which run very far into the land, and are so near together that only narrow necks of land lie between them. The only parts of the island that are inhabited are the coasts and the banks of the rivers. As the inhabitants depend upon the water principally for the means of satisfying the chief necessities of life, they can only fix their habitations in the neighbourhood of it. The climate is better than might be expected in so high a northern latitude: the principal reason of this is, that the island is sheltered by the high mountains to the north-north-east, and west, upon the continent of America and the peninsula of Alaksa. These mountains, which are covered with eternal snow and ice, enclose the island like a high wall, and protect it from the cold and piercing winds of those quarters. The winters are frequently so mild in the low parts of Kodiak, that the snow does not lie upon the ground for any length of time, nor is any thing like severe cold felt.

The soil in the low parts is fertile, producing grass abun-

dantly, and very well suited to the feeding of cattle. The Company have about thirty or forty head of horned cattle here, a number of hogs, which, like those at Oonalashka, are fed upon fish, and some goats. Sheep might undoubtedly also be fed, and they would probably thrive exceedingly.

The few experiments that have been made for cultivating corn have not succeeded, as the plants have run up very high in the straw, but have had very short ears, and yielded very little grain: this superabundant growth is ascribed to the soil being too fat. Potatoes and other culinary vegetables thrive exceedingly, yet we saw no kitchen-gardens excepting that of M. Bander. Many sorts of pulse, for instance pease and beans, will yield fruit during the summer, but the seeds will not ripen for winter stores.

The inhabitants differ very little from those of Oonalashka. The men are in general somewhat taller and more robust, but are undoubtedly of the same race. Their language is somewhat different, but their manners, customs, modes of life, food, and clothing, are almost entirely the same. Their habitations are in their most essential features like those of the other Aleutians; the principal variation is, that they are more spacious, and that more wood is used in the building them; the entrance is not in the roof, but on the side; it is, however, commonly so small, that the people are obliged to crawl in upon their hands and knees. Instead of a door, a frame with the skin of a sea-dog stretched over it is placed before the opening. These huts, half sunk into the earth, and destitute of stoves, protect the inhabitants very sufficiently from the cold of winter.

The principal garment of the people of Kodiak, which they call a konägen, is of the same form as that worn by the other Aleutians, and is made, like theirs, of sea-dogs skin, or of the skins of sea-fowl, particularly the *alca arctica*, *alca cirrhata*, and *pelecanus urile*. But as Kodiak is richer in natural productions than the other islands lying more to the west, the inhabitants find more resources for satisfying their wants: they make use, for example, of bear-skins for their dresses, and use also the entrails of bears, as well as of sea-dogs, for their rain garments. Instead of the wooden caps worn at Oonalashka, they make head-dresses of straw and bark of trees, which are woven together very ingeniously, and dyed in various ways with different coloured ochres.

The slit in the under-lip, and the ornaments of glass beads and muscle-shells in the nostrils and ears, the tattooing of the chin and neck, and many other customs in which these people formerly took great delight, are now rarely seen. In the state of oppression, and consequent depression of mind, under which they live, all taste for former objects of pleasure gradually vanishes; they still, however, sometimes dye their faces, rubbing them with coal, red clay, or other sorts of earth of different colours.

The baidarkas are constructed in the same manner as those already described, but not with the same neatness and exactness as at Oonalashka: they are broader and more bulky, seldom being made for one person only, but commonly for two or three. The javelins are thrown from a plank, as in the other islands, but differ from them both in length, thickness, and

form. Their sports and dances are exactly the same: in the latter they make use of a sort of rattle composed of a number of the beaks of the sea-parrot, strung upon a wooden cross: this produces an effect resembling very much the Spanish castagnettes. They have accustomed themselves so much to taking snuff, that it is become a matter of the first necessity to them.

Of the Russio-Greek religion they scarcely know any thing more than how to make the sign of the cross, yet there is a church and an ecclesiastical establishment. They know no other laws than the submission exacted from them by the strong arm of power; nor does it seem ever to have entered into the ideas of their conquerors to instil into their minds the more pure and correct notions of morality that obtain among civilized nations. Male concubines are much more frequent here than at Oonalashka, and I was assured that the most promiscuous intercourse between the sexes, even among the nearest relations, is allowed: not only do brothers and sisters cohabit with each other, but even parents and children. An Aleutian, whom I questioned upon the subject, answered me with perfect indifference that his nation in this respect followed the example of the sea-dogs and sea-otters.

It is grievous to reflect, not only that the Russio-American Company do not seem to think of putting any restraint upon this corruption of morals among the natives, and endeavouring to teach them better, but that, on the contrary, the Russians who are settled here rather suffer themselves to follow such licentious examples. I inquired one day of Lieutenants Schwostoff and Davidoff why they shunned the society of a man who seemed

to be very well informed, and who was represented to me as a sea-officer, for I observed that they appeared studiously to avoid him whenever they saw him: they told me that he had been banished to Siberia for unnatural connections, as well as for incest with his own mother, but that he afterwards found means to get into the service of the Russio-American Company. But why do the Company take such persons into their service?---Why do they not inquire more strictly into the characters of those whom they employ?---It is true that this man was dismissed by them two or three years after, not however on account of his former scandalous character, but partly because his latter conduct did not in the least contradict the former, and still more because he was constantly incurring debts which he was unable to pay.

The principal occupations of the inhabitants of Kodiak, as of the other islands, is hunting and fishing. The men catch whales, sea-otters, sea-dogs, &c. &c., make the baidarkas and the oars with which they are navigated, the javelins, and the planks for throwing them. The women with the schopans clean and dry the fish, collect berries and roots, sew the skins together for the baidarkas, make the cloaths, draw the threads from the tendons of different animals, and make slings and fishing-hooks.

The want of timber on the south-western coast of Kodiak, and the difficulty of transporting it thither from other parts, induced the Superintendent Von Baranoff some years ago to transfer the factory to the north-eastern coast: in this part of the island there are considerable forests of fine tall trees, with

an excellent harbour, where the largest ships find very secure anchorage, and are effectually sheltered from all winds.

High mountains, low hills with beautiful vallies and little streams running between them, green and partially wooded islands, with the neighbourhood of a sea that yields fish in the greatest abundance, render this situation at once advantageous and agreeable. The Neva had the preceding year brought hither a quantity of flour, sugar, brandy, cloth, and other articles, to supply the principal wants of life; and the excellent table kept by Madame Bander during the whole time we were here, gave us the most favourable idea of the generally flourishing state of the establishment. The settlement consists of about thirty buildings, the principal among which are, the church, the barracks, the compting-house, the warehouses, the houses of the director and the clergyman, the school, and the shops of the handicraft workers: at a little distance are to be seen the habitations of the Aleutians.

Kodiak is the principal magazine where all the peltry collected in the neighbouring islands, at Alaksa, in Cook's River, in Prince William's Sound, in Behring's Bay, and other places where there are smaller settlements, are finally stored up. In the warehouses here, consequently, a large stock of very costly furs is often to be found. In the year 1802 the number of sea-otter skins, which had been collected during the five preceding years, amounted to no less than eighteen thousand*.

* This large stock, which, with the fox-skins, American martin, black-bear, and sea-bear skins, were worth nearly two millions of roubles, were brought by Lieutenants Schwostoff and Davidoff in the year 1803 to Ochotsk.

Among the Russians or Promüschleniks established here, are handicraft-workers of almost every kind, who have each their workshops particularly appropriated to them. Numbers of these men are persons, who, for some stroke of genius, were banished to Siberia, whence they were tempted to seek their fortune under the wings of the Russio-American Company in this remote corner of the globe; it is therefore not surprising that, though in a moral point of view they may be called the refuse of mankind, some very excellent workmen, such as watchmakers, gold and silver workers, shoemakers, taylors, smiths, &c. should be found among them.

The situation, the climate, the productions, all seem to unite in affording a reasonable expectation that this establishment, if properly managed, would enjoy a high degree of prosperity. Yet, alas! this is by no means the case, nor does it seem likely to be under its present circumstances. It appears at least impossible under the existing organization of the Russio-American Company, while almost all the subordinate persons employed by it are men nearly devoid of any feelings of honour or principle.

Though I did not become acquainted with the excellent M. Von Baranoff till my stay at Sitcha, this appears to me the properest place to introduce him to the knowledge of my readers. He is superintendent of all the Company's possessions in the Aleutian Islands and America. He has a most extensive local knowledge of the countries under his jurisdiction; and since the greater part of the Promüschleniks and inferior officers of the different settlements are Siberian crimi-

nals, malefactors, and adventurers of various kinds, not a little credit is due to his vigilance and address, that he has been able in any degree to put a bridle upon them.

Never long stationary, he is sometimes at one, sometimes at another of the settlements, and always carrying on some project for the general good. For several years he remained in this miserable part of the world almost entirely neglected, without receiving any support or intelligence from the head-quarters of the Company in Russia. Pursued by hunger and thirst, he and his companions had sometimes no other resource left but to live like the Aleutians on sea-dogs, fish, and muscles, yet in the midst of this wretchedness he built boats, erected new settlements, enlarged the fur-trade, and extended the territories and domains of the Company. Sometimes by the unexpected arrival of a ship from the United States of America, with which he entered upon a little intercourse of trade, his most pressing necessities were relieved, but this was all a mere matter of chance.

For upwards of thirty years has he continued in this sort of banishment; he was not a young man when he entered upon his situation, and now, as a most upright and faithful steward grown grey in the service of the Company, to whose advantage his health and the best years of his life have been sacrificed, he has a truly just and urgent claim upon their gratitude to afford him the means of a tranquil and happy retirement.

His long abode among so rude and uncivilized a race, his daily intercourse with a dissolute and licentious rabble, with

rogues and cheats, and the necessity he has been under of having recourse to severity and harshness in order to insure his own safety and that of the Company, have indeed somewhat blunted his finer feelings, and rendered him less alive than he probably once was to the voice of compassion and philanthropy. He knows how to assert his dignity and maintain his authority on all occasions, is hospitable and disinterested, sometimes perhaps too much disposed to be partial to persons in whom he has reposed confidence, and who have rendered him important services in the execution of his plans, or who are at present necessary to him. It follows from thence that his goodness and forbearance are not unfrequently abused, and made subservient to purposes not advantageous to the interests of the Company and prejudicial to the Aleutians and Promüschleniks.

The weakness of his declining years, the shameful conduct of the people under him, the great extent of the colonies under his care, and their distance from the fountain-head in the mother-country, the want of regular institutions and a regular administration of justice, these are, according to my opinion, the principal causes of a great many abuses, which even the most upright man cannot wholly counteract.

The stewardship in each single establishment is entirely despotic; though nominally depending upon the principal factory at Kodiak, these stewards do just what they please, without the possibility of their being called to account. The Aleutians of the distant islands are commonly under the superintendence of a Promüschlenik, which is, in other words, under

that of a rascal, by whom they are oppressed, tormented, and plundered in every possible way.

It has often struck me as a very extraordinary circumstance, that in a monarchical state a free trading company should exist independent as it were of the government, not confined within any definite regulations, but who can exercise their authority free and uncontrouled, nay even unpunished, over so vast an extent of country. The Russian subject here enjoys no protection of his property, lives in no security, and if oppressed, has no one to whom he can apply for justice. The agents of the factories, and their subordinate officers, influenced by humour or interest, decide every thing arbitrarily, without the least apprehension of having to render an account of their conduct; for that their scandalous behaviour, their daily transgressions, should ever be noticed by their lords and masters at St. Petersburgh, is a thing that does not enter into their ideas. Complaints and complainants are to be found there in abundance, but no judges *. I have for example seen the Russian Promüschleniks, or fur-hunters, dispose of the lives of the natives solely according to their own arbitrary will, and put these defenceless creatures to death in the most horrible manner. The Russians therefore, with their wives and children, are every where hated by the natives, and murdered whenever a favourable opportunity offers. It has three times happened on the north-

* I am very far from intending to impute blame in this respect to the worthy directors of the Russio-American Company at St. Petersburgh; I am on the contrary almost convinced that not one of them is really acquainted with the true state of things, and conceive that they will think themselves obliged to me for having impartially called their attention to a very crying abuse.

west coast of America, that one or other of the Russian establishments has been fallen upon by the Americans, and all people, including even the Aleutians, with the wives and children of the Russians, have been massacred.

The injustice and arbitrary power exercised by the under-directors and stewards of the Company over the natives is carried so far, that the latter have lost all kind of property, and scarcely now possess even a garment that they can call their own. What Sauer relates in his travels, that the Company have got possession of almost all the baidars, or leather boats, belonging to the Aleutians, is a principal cause of the oppression under which they labour; for when people, who depend almost entirely upon the water both for their food and clothing, are deprived of their boats, they have no resource left for the support of life. The Aleutians are at present so completely the slaves of the Company, that they hold of them their baidars, their clothing, and even the bone with which their javelins are pointed, and the whole produce of their hunting parties is entirely at their disposal. The stewards and overseers order as many people of either sex as they have occasion for, to go out hunting, or compel them to do other kind of work as they please, to prepare skins, to make clothes, to fabricate baidarkas, to clean and dry fish; thus all freedom of action is destroyed among them; they cannot even employ their time according to their own choice. It is revolting to a mind of any feeling to see these poor creatures half-starved and almost naked, as if they were in a house of correction, when at the same time the warehouses of the Company are full of clothing and provisions.

Nor is this the case with the natives alone: the Russian Promüschleniks, who are not employed as mechanics or under directors, but are either sailors, labourers in husbandry, or fellers of timber, are not in a much better situation. They are extremely ill-treated, and kept at their work till their strength is entirely exhausted; if they are ill they must never hope for medical assistance, or support in any other way; while as little attention at the same time is paid to their minds as to their bodies. The bad quality of their food, which consists chiefly of the flesh of whales and sea-dogs, the moist foggy climate, the dirtiness of their habitations in the barracks, the want of a proper change of linen and clothing, all these are circumstances sufficient to undermine the strongest constitutions. The scurvy in consequence generally breaks out upon them after a very short stay in the country, and not a year passes that it does not carry off many. If it were known how many Promüschleniks had gone within the last thirty years from Ochotsk to America, and how few of them ever returned to their native country, or are now alive, or if a faithful account were published from the head-quarters, of the former and present state of the population of these islands, the truth of what I have advanced would be fully confirmed.

The reciprocal relations of the Promüschleniks with the Company is founded upon a very strange principle.---A certain portion of the produce of every hunting party is to belong to the hunters, but as the latter never know the value of the booty obtained, they can never be assured whether they receive their due or not. The accounts are never made out till after a lapse of some years, and as all the necessaries of life have

during this time been sold to them by the Company, for which extravagant prices are always charged, it commonly appears that they are debtors, instead of creditors to their employers, and they are detained as hostages for the payment of their debts. They then strive to drown their cares in brandy, and should they be strong enough to survive so many trials, must esteem themselves fortunate, if, after many years spent in hardships and privations, they return home at last with empty pockets, ruined constitutions, and minds wholly depressed and broken down. The number of those who, at the expiration of the time they had engaged to remain in the service of the Company, had some hundred roubles to receive from them, has indeed been very small.*

The productions of the animal and vegetable kingdoms are much more various on the Island of Kodiak than on the other Aleutian Islands. In the following catalogue the principal ones will be enumerated, in conjunction with those of the adjoining coasts of America.

Whales and sea-dogs are in great abundance; sea-bears and sea-lions are not in equal profusion. Sea, river, and marsh-otters, were formerly taken by thousands. The sea-otters, which were the principal source of wealth to the Company, are now nearly extirpated, a few hundreds only being annually col-

* A faithful and excellent picture of the situation of the Promüschleniks, and of the treatment they receive, will be found in Captain Krusenstern's voyage round the World. Vol. 2, page 118 to 122.—Author.

See vol. 2. page 104 to 114 inclusive, of the translation of Captain Krusenstern's voyage.—Translator.

lected by the Company. The high price given for the skins induces the Russians, for the sake of a momentary advantage, to kill all they meet with, both old and young, nor can they see that by such a procedure they must soon be deprived of the trade entirely. The skins of the very young ones are in the language of trade called medwedki, the middling-size ones have the name of koschloki, and the full grown ones of matki.

The Aleutians are excellent marksmen, and throw their javelins with a peculiar adroitness. They commonly go to the chase of the sea-otter with several baidarkas, and as soon as they see one of the animals, form them into a circle round it, when they are almost sure of the game, since, like the whale and sea-dog, it must come up to the surface of the water to breathe, at short intervals of time.

A great variety of the rarest kinds of fox-skins may often be seen in the Company's warehouses. Among them are the black fox, *canis lycaon*, called here tschnernoburi, another blackish, a reddish, and a silver-grey fox, which seem varieties of the former, and are called sewoduschki, krasnoduschki, and beloduschki; the latter seem to be tolerably substantial. The stone-fox, *canis lagopus*, in Russian Peszi, which abounds in the Islands of St. George and St. Paul, is never found here.

Brown and red bears, the skins of which are of great value, are found very abundantly: the valuable black bear, the skins of which form a part of the Company's stock, are not the produce of the islands, but of the continent of America, about Cook's River, Prince William's Sound, and other places.

The zisel marmot, *arctomys citillus*, in Russian Jewraska, comes in immense numbers from a small island north of Kodiak, called Jewrascheschei Ostrowa, and serves the Aleutians very much for winter clothing. The common marmot, in Russian *Tarbogan*, is also in great abundance. The beaver *castor fiber*, the rein-deer *cervus tarandus*, the glutton *ursus gulo*, the lynx, chiefly that of a whitish grey colour with pale spots, and the hairy hedgehog without a tail, *erinaceus ecaudatus*, are not very common in the islands, but much more so on the peninsula of Alaksa and the continent of America.

The Overseer Bander shewed me the wool of a wild American sheep, which was whitish, fine, and very long, and is much used by the natives of the north-west coast of America for clothing and carpets. I never could obtain a sight of the animal that produced this wool; it must however be very different from the *argali*, or wild sheep, *oris ammon*, for this has a sort of hairy coat, more like the rein-deer, and nothing like wool. I do not know that any seaman or naturalist has described or mentions having seen the American wool-bearing animal in question.

I scarcely saw any land or singing birds, but marsh and water-fowl are every where in the greatest abundance. Swans, geese, ducks, cranes, herons, auks, guillemots, plovers, and many others, come in innumerable flocks, both in spring and autumn; and the magpye, which among us is very shy and timid, is here as familiar as a sparrow, perching often upon the house-tops.

The most common fish, those which fresh and dry constitute a principal article of food, are herrings, cod, holybutt, and several sorts of salmon: the latter come up into the bays and rivers at stated seasons and months, and are then taken in prodigious numbers by means of nets or dams. The sea is besides rich in mollusca, medusæ, shell-fish, and marine plants.

Very few insects fell under my observation. In the little habitation assigned to me I found a profusion of bugs, which I cannot say contributed to the comfort of my life. The inhabitants assert that these insects are only known in the country within a few years, and were brought by the ships from Ochotsk and Kamschatka. Another circumstance appears to me worthy of observation. The mill-beetle, *blatta orientalis*, which was in vast numbers on board both the Nadeschda and the Neva, was unknown at Kodiak till brought thither by the latter; but the creatures immediately lodged themselves there in such abundance, that scarcely a house was free from them: the numbers were indeed so great, that in unloading the vessel, and bringing the sacks of meal from thence to the warehouses, the way was strewed over with them, forming, like ants, a living path. This plague however was happily not of any continuance; in a short time they all vanished of themselves, so that by the time we arrived not a single one was to be seen in the settlement. This circumstance appears to me the more remarkable, as these insects have by degrees spread from European Russia all over Siberia, even to Kamschatka, where almost every house is plagued with them, to the great annoyance of the inhabitants.

The vegetable kingdom at Kodiak differs essentially from the other Aleutian islands, since here alone are to be found large forest-trees, such as larches, firs, birch, poplars, silver poplars, alders, and willows. Excellent berries and roots, a great variety of which I had found at Oonalashka, were also abundant here: the Saranna-root, of which a large provision is made for winter stores, is not near so well-flavoured as at Kamschatka; it has here a bitterish taste. Besides most of the plants which I have enumerated as growing in the island of St. Paul and at Oonalashka, I found the following:

Arenaria laterifolium.	*Gentiani prætensi affin.*
Aconitum.	*Heuchera,* a new species.
Angelica.	*Lupinus.*
Achillea.	*Parnassia.*
Arbutus Uva ursi.	*Rhinanthus an orista Galli.*
Aspidium.	*Sanguisorba an officin.*
Betula pumila.	*Spirea betulifolium.*
Comarum.	*Solidago.*
Cacalia.	*Swertia perennis.*
Campanulæ.	*Saxifraga,* a new species.
Epilobium spicato affin.	*Veratrum album.*
Galeum an boreale?	*Viburnam Opulus,* &c. &c.

A short and indefinite stay, almost constant rain, my ignorance of the language, and want of support in my researches in Natural History, prevented my time being much employed according to my wishes. To examine a country accurately, three things are essentially requisite, not one of which I at this time enjoyed, leisure, serenity of mind, and convenience.

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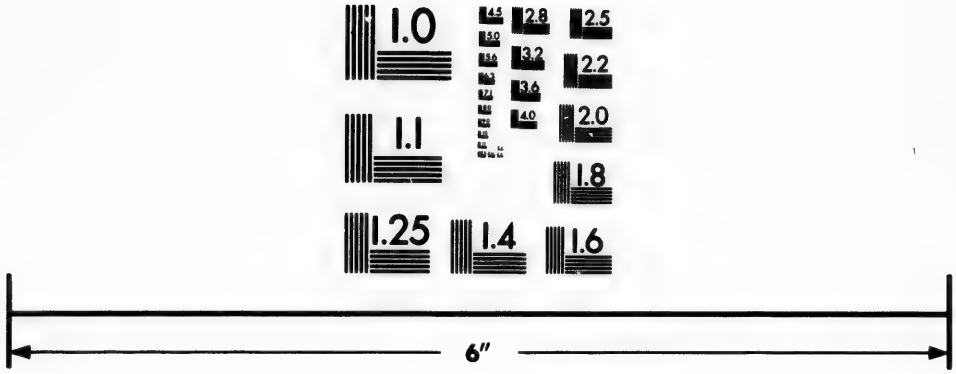

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Scarcely was my attention fixed upon any object before I must prepare for my departure, since the Chamberlain Von Resanoff thought it necessary, in order to arrive at a knowledge of the real situation of the different settlements, to see M. Von Baranoff as soon as possible, and he was at Norfolk Sound. Before I quit the island of Kodiak, however, I must not omit to mention some of the most important changes made by the Chamberlain for the improvement of the settlement.

In the first place, he represented very strongly to all the inhabitants, Russians as well as Aleutians, the advantages that would accrue from having their children instructed, so that they might be qualified to become clerks in the compting-houses of the Company, stewards and overseers in the settlements, pilots on board the ships, or even commanders of the ships themselves; in a short time, consequently, most of the young people from twelve to sixteen years of age were brought to the principal school to be instructed in reading, writing, keeping accounts, geography, mathematics, and the French language. The number before our departure amounted to between sixty and seventy, who were all clothed, fed, and instructed entirely at the expence of the Company: they besides received religious instruction from the ecclesiastics, and were taught navigation by the sea-officers.

The Chamberlain had sent by the Neva some books from his own library, and during our stay he arranged them himself in the house built by Captain Lisiansky. The hunter who came with us from Kamschatka, to assist me as well in procuring as preparing objects of Natural History, was now desired to take

two young men under his tuition, and instruct them in the art he had himself learnt to practise, and at the same time to begin making a collection, that so this branch of science might in future undergo material improvement here; particularly that the natives might be made better acquainted with the productions of their own island.'

Whatever objects could be procured during our stay were therefore prepared, and deposited in the temporary Museum, and M. Bander laid the plan of a new building to be begun the following spring for a library and permanent museum. At the same time he gave orders that in building this, and all other new houses, a certain regularity should be observed, so as to form a street; thus Kodiak may by degrees vie in this respect with the best-built European town. The electrical machine also intended for Japan was now deposited here.

As we had found such a constantly well-ordered table at the house of our hospitable host, a wish was excited in the plenipotentiary that the same advantage might be enjoyed in future by all sea-officers or other persons coming hither in the service of the Company. He therefore begged Madame Bander to take under her tuition a certain number of girls about fourteen or fifteen years of age, and instruct them in household employments, particularly in gardening for the table, and cookery. His wish was instantly complied with, and during our stay some very promising young people were placed under her at the expence of the Company: they were all dressed alike, and after the European fashion. Often, when he was attending to these things, would the Chamberlain delight himself with the idea of the astonishment that would hereafter be experienced

by seafaring persons coming hither, to see so unexpectedly a handsome regular built town, a large school, a numerous library, an electrical machine, a cabinet of Natural History, good cooks, and excellent dinners dressed after the European fashion.

No new regulations were at present made for the better feeding and providing for the wants of the Aleutians and Promüschleniks; they still sighed under the yoke which had been imposed upon them, and saw us depart without hope. To a feeling heart it was impossible not to be impressed with the deepest compassion at the daily spectacle of so many unhappy beings.

As it was very necessary in the prosecution of our voyage to have a healthy crew, particularly at Sitcha, where it was intended that new ships should be built, the most healthy men to be found at Kodiak were selected, and taken into our service, and those who were afflicted with the scurvy, or otherwise ill, were left upon the island.

Our ship, the brig Maria, having now taken in a stock of wood, water, and provisions, the latter consisting chiefly of fish, fat of whales, and berries, we set sail on the twentieth of August with no very pleasing prospect before us of the winter quarters to which we were going. Having a favourable wind on the twenty-fifth, in the evening we saw Cape Edgecumbe, the north-west point at the entrance of Norfolk Sound, lying in latitude 57° 2′ north, longitude 135° 35′ west. On the following day we arrived happily at the settlement of Sitcha, which lies in latitude 57° 5′, longitude 135° 8′, and were received in the most hospitable and obliging manner by M. Von Baranoff.

CHAPTER IV.

Conquest of Sitcha.—Situation of this Settlement to the end of the Year 1805, and in the beginning of the following Year.—Letter to the Counsellor of State, Blumenbach.—Description of the Climate and Natural Productions of Norfolk Sound.

THE constant decrease in the number of sea-otters taken for some years upon the coast of Kamschatka, and the great advantages derived from the trade in these valuable skins, induced the Russians to extend their possessions eastward from the continent of Asia; first, to the islands between that coast and America; and finally, to the north-west coast of America itself. The same thing occurred in all other parts as had happened on the peninsula of Kamschatka, where originally the sea-otters were taken in very great abundance*: they were hunted with such extreme eagerness, and killed in such numbers, that their total extirpation was to be apprehended in a very short time. Thus the hunters continued following them first from one of the Aleutian islands to another, afterwards to Cook's River, and Prince William's Sound; then to many other bays and creeks along the coast of America, killing with so little mercy and discretion, that the race are exceedingly dimi-

* As the greatest part of the sea-otters at first taken came from the coast of Kamschatka, the creature obtained the name in Russia of the Kamschadale biber. It is now, however, only to be seen as a rarity upon this peninsula.

nished. At present, few are left in existence, or else they have migrated into the more southern parts, and the hunting parties in the northern possessions scarcely answer the expense and trouble incurred in them.

As however the Russians are naturally unwilling to forego entirely such a source of wealth, and the credit moreover of an Imperial Chartered trading Company ought to be supported, it has always been deemed right to continue the pursuit of the trade, and to proceed constantly farther and farther to the south-east, in hopes of still finding new supplies. Norfolk Sound appearing to present a favourable spot for a fresh establishment, as it was then inhabited by considerable numbers of the sea-otters, the Director Von Baranoff thought it expedient some years ago to take possession of it. This hardy adventurer drove the natives, who are called by the Russians Kaluschians, but by themselves Schitchachans, that is, inhabitants of Schitcha or Sitcha, from the coast, and laid the foundation of a new settlement, to which the name of Sitcha was given.

M. Von Baranoff, having built a fortress with some dwelling-houses and warehouses, and having, as he hoped, conciliated the Kaluschians, by making them many presents, returned to Kodiak, trusting this new possession to about thirty Promüschleniks, with a superintendent, and some Aleutians. Some years after, at a moment when these people were all dispersed, following their different occupations, such as fishing, cutting down timber, and various other things, the Kaluschians fell upon them, and almost all were killed: a very few of the Aleutians alone saved themselves by taking to their baidarkas.

It was by these people, who kept along the coast till they arrived at Kodiak, that the news of the catastrophe was communicated to the factory there.

The settlement was however of so much importance, from the number of sea-otters that had been taken in the Sound, that M. Von Baranoff determined on endeavouring without delay to regain the possession of it, and in the end he succeeded. It is extraordinary how often the reputation of a man is alone sufficient to strike a panic terror into his antagonists, and to accomplish the purpose he undertakes without striking a stroke.

In the summer of 1804, M. Von Baranoff sailed with the ships, Alexander of a hundred tons, Ekaterina of eighty, and Yermack of sixty, from Kodiak to Cross Sound, on a hunting-party for sea-otters; and as he had received notice that the Neva might be expected at Kodiak, he left orders that this vessel should be directed to follow him to Norfolk Sound. All this was punctually performed, and in August the four ships were united, the Alexander and Ekaterina having between them a complement of fifty-eight men, the Neva having fifty-four, and the Yermack fifteen. On the eleventh of August, they reached the habitations of the Kaluschians, who, as soon as they heard that the hero Nanok, the name by which M. Baranoff is known among the inhabitants of a considerable tract of the coast, was at the head of the party, did not venture on making the least attempt to oppose their landing. The commander immediately took possession of an eminence, which, running into the harbour, forms a sort of cape, at the foot of

which was a village which had been entirely abandoned by the Kaluschians.

From the intercourse of trade carried on to these parts by the United States of America, and from the destruction of the original Russian Settlement, the Kaluschians were in possession of fire-arms, powder, and shot. They retreated from the hill above mentioned to a wood at the mouth of a small river, where they in a manner fortified themselves by means of a very strong pallisade, which had been prepared some time before against the probable and long-expected visit of the Russians. On the nineteenth of August, this fortress was formally invested. The Neva was posted at the mouth of the river, with her artillery directed partly on the side towards the cape and fortress, and partly to the opposite bank of the river. On the land-side, a similar arrangement was made by the commander, so that the fortress was completely surrounded. The number of people enclosed there, without including women and children, was supposed to consist of three hundred men capable of fighting.

The siege lasted four days, and the contest was carried on with great warmth on both sides. At the expiration of this time, as a breach was made in the fortress, the Kaluschians capitulated, and after giving up nine youths, sons of the most distinguished persons among them, as hostages, fled by night over land, though, according to the treaty, they were to have had a free passage by water in the day. Three sailors of the Neva, three Promüschleniks, and several Aleutians, were killed on the side of the besiegers, and a considerable number were wounded: the commander himself had the right hand wrist

grazed with a shot. The loss of the Kaluschians was never certainly known, but according to the report of the hostages, and of some straggling fugitives who were taken, it must have been very considerable.

Thus did M. Von Baranoff regain possession of Sitcha. He immediately began the foundation of a new establishment upon the hill, or cape, above mentioned, which, from the nature of the ground, was a sort of natural fortress, giving it the name of New Archangel. Here he remained during the winter with the ships that had accompanied him, but the Neva, after a stay of some months, returned to winter at Kodiak.

From this period an outward appearance of friendship has been maintained between the two parties. The Kaluschians from time to time visit the Russian settlement, formerly their own place of abode, without venturing to make any external show of enmity; yet, as it can scarcely be supposed that they are free from it in their hearts, the commander has always judged it prudent to keep a watchful eye over them, lest the interlopers, for it cannot be denied that they are such, should be sacrificed to their revenge. That they should entertain an unalterable enmity against the Russians is the more natural, since they have not only been driven from their hereditary possessions by them, but they have also been deprived of their great means of wealth, nay, even of subsistence derived from the sea-otters, the fish, and other marine productions, with which the coast they inhabit so richly abound.

Formerly these people carried on a free trade with the United

States of America, who made annual voyages to their shores, bringing rice, linen and woollen cloth, knives, axes, hatchets, kettles, kitchen utensils, and drinking vessels, to exchange for sea-otter skins. But no such trade can now be carried on. As the Russians take all the sea-otters that are to be found, the ships of the United States will have no farther motive for visiting the Kaluschians, and the latter, deprived of this trade, will have no means of procuring the clothing, food, and other conveniences to which they have been for fifteen or twenty years accustomed. Many ships from the United States come now to the Russian settlement, and the Russians are glad to exchange their sea-otter skins for various articles of the first necessity brought by them. Happily the whole tribe of the Kaluschians does not exceed between three and four thousand souls, but this number is sufficient to render it necessary for the new settlers to be always upon the alert, and to live constantly with arms in their hands, that they may be in a state of defence against the possible attacks of such a highly irritated enemy.

It appears as if the settlement of Sitcha, or New Archangel, would be the *ne plus ultra* of the Russian possessions upon this coast. I have been assured by persons deserving of credit, that the tribes lying to the south and south-east of Sitcha are much more populous, and bear such a determined hatred to the conqueror Nanok and his hunting parties, that it is very probable a disastrous fate would await him and his whole company if he should ever seek to establish a settlement farther south. It is probable, for the same reason, that Russia neither can or will ever endeavour to establish a claim to the islands lying south of Norfolk Sound and Cape Tschirikoff.

The settlement of New Archangel, it will be seen from the above account, was at our arrival quite in its infancy. For its greater security, it had been judged expedient to bring hither, from the other possessions, many of the most healthy Promüschleniks and Aleutians: the cape was fortified with large cannon, and some armed vessels of the Russio-American Company were stationed before it, while a regular watch was kept both by day and night. Under such circumstances, nothing like the conveniences of life could be expected: the habitations were for the greater part unfinished, and consisted of small chambers without stoves, with so thin a thatch, that the rains, which we had continually, often came through. The Promüschleniks were kept constantly hard at work upon the barracks, warehouses, and other buildings, which were so exceedingly wanted.

However agreeable it was therefore to the Governor Von Baranoff to receive as his guest a plenipotentiary of the Company, and to become acquainted with a person of such high distinction as the Chamberlain Von Resanoff, yet as a careful housekeeper, he was put into no small embarrassment by the wholly unexpected arrival of so large a train of visitors: it was no easy matter to devise the means of providing winter stores for such increased numbers, especially as the provision for that season was previously somewhat deficient. This embarrassment became still greater, when, some weeks after, a number of Russians and Aleutians returned from a hunting party to take up their winter quarters here. We were now altogether nearly two hundred people at the settlement, including the higher and subordinate directors, sea-officers, Promüschleniks, and Aleutians. The ships in the harbour consisted of that which had

brought us, the brig Maria, of a hundred and twenty tons, the Alexander and the Elisabeth, each of a hundred tons, the Ekaterina of eighty, the Yermack of forty, and the Rossisland of twenty-two.

To avert the menaced evil, and assist in providing for the necessities of those under his care, the superintendent dispatched the ship Alexander to the new harbour at Kodiak to collect as large a quantity as possible of dried fish, berries, train-oil, Saranna-roots, fat of whales, and other articles of food. It was determined, at the same time, that the brig Maria should go on a like errand to the harbour of Schelikoff.

For several weeks a vessel from the United States of America, the Juno, of two hundred and fifty tons, from Bristol in Rhode-Island, had been at anchor here. It had purchased a large cargo of sea-otter skins from the natives of Charlotte Island in Nootka Sound, and other places upon the coast; and the captain, by name J. Dwolf, hearing in May of the new Russian settlement at Sitcha as being a safe harbour, where wood and water might be procured among Europeans, and where possibly a market might be found for the sea-otter skins, he resolved, especially as his ship wanted some repairs, to run in there.

The Governor Von Baranoff, and the Plenipotentiary Von Resanoff, now entered into a negociation with Captain Dwolf for the purchase of his ship, with the rigging, provisions, and every thing belonging to it, and the bargain was soon concluded for sixty-five thousand piastres, or Spanish dollars, in a bill of

exchange upon St. Petersburgh; besides this, he was to have the little ship Yermack. The latter was necessary to the captain that he might send his crew, with the sea-otter skins not included in the sale of the ship, immediately to the Sandwich Islands and Canton. He himself, however, expressed a wish to remain at New Archangel for the winter, that he might be ready to go in the spring to Ochotsk, as he was assured that as soon as the season would permit a ship would sail for that port. He purposed going over-land from Ochotsk to St. Petersburgh, there to negociate his bill of exchange in person. Thus did the Juno become the property of the Russio-American Company, while her late captain remained among us during the winter, and the Yermack sailed in October, under the command of Captain Moorfields, for the Sandwich Islands and Canton.

By this purchase the Company obtained an excellent swift-sailing vessel, with a rich lading of objects of great importance for trading with the natives on the north-west coast of America, consisting of a great quantity of linen and woollen cloth, of kitchen utensils, knives, axes, hatchets, some fire arms, &c. &c. But above all, a large supply of excellent provisions was obtained, by which all apprehensions of the menaced famine were removed. In fact, it was principally for the sake of this supply that the purchase was made.

Besides a small quantity of pease, beans, butter, tallow, &c. the following substantial stores were procured:

Nineteen casks of salted pork, each weighing two hundred pounds English.

Forty-two casks of salted beef, each of the same weight.

One thousand nine hundred and fifty-five gallons of molasses.

Two thousand nine hundred and eighty-three pounds of powder sugar.

Three hundred and fifteen pounds of loaf sugar.

Four thousand three hundred and forty-three pounds of rice.

Seven thousand three hundred and ninety-two pounds of biscuit.

Eleven casks of fine wheat flour, each of one hundred and seventy pounds weight.

Before this transaction, upon the first arrival of the ship in the month of May, the following articles had been purchased of Captain Dwolf.

Twenty casks of flour.

Eight casks of rice of six hundred pounds each.

Six casks of rum of a hundred and ten gallons each.

Six hogsheads of tobacco-leaves, of sixteen or eighteen hundred pounds each.

A quantity of rye-flour, brandy, and other articles, had been moreover procured from the ships Maria and Neva, so that it was hoped, that by a judicious distribution of the supplies, every one might be amply furnished the whole winter through with wholesome food. This was, however, alas! not the case. The Promüschleniks are here, as well as at Kamschatka, and in all other parts, fed very scantily, nor is the least attention paid to the daily increasing numbers of the sick.

The command of the Juno was given to Lieutenants Schwos-

toff and Davidoff, and it was immediately arranged that this large and light-sailing vessel should be dispatched to the harbour of Schelikoff at Kodiak, instead of the heavy-sailing brig Maria. The two above-named active officers departed accordingly from Norfolk Sound on the fifteenth of October, and returned on the seventh of November, bringing with them seventy thousand dried fish, a quantity of whale-fat, train-oil, berries, saranna-roots, and other productions of Kodiak. As there was besides a great deficiency of women in the new settlement, a number were brought by them, under the strength of an order which they carried for the purpose to the Governor of Kodiak, M. Bander. From such an order being given and acted upon, it is obvious that the Aleutians are complete slaves to the Company: no Aleutian of Kodiak would ever voluntarily remove to Sitcha, since very few of those that are transported thither return back again. During this voyage of Lieutenants Schwostoff and Davidoff, a Promüschlenik was carried away by a high wind as he was climbing the mast, and drowned.

The ship Alexander was expected back in vain, nor did it return to Norfolk Sound till the spring. As the very same thing would most probably have happened with the Maria, the quick return of the officers with the Juno was an admirable testimony to the wisdom shewn by the Governor and Plenipotentiary in the purchase of that vessel; for notwithstanding the supply of stores obtained by the bargain, the settlement would have experienced a considerable degree of scarcity without the assistance procured by the Juno's voyage to Kodiak.

After the return of the Juno, the keel of a small vessel was

laid down, which was to be built by Messrs. Korükin and Popoff, ship-builders, under the direction of Lieutenants Schwostoff and Davidoff. This work went on very slowly: the portion of food allowed to the Promüschleniks, who besides were exposed, scarcely half clothed, to the cold, the rain, and the snow, with scarcely a roof to shelter them, was two or three dried fish *per diem*; or sometimes, by way of change, they were indulged with the rancid fat of a whale which had been cast on shore, and was perhaps already half putrid. On Sundays they had a portion of thin soup, made with salted meat and a little rice, and occasionally a glass of brandy or a small quantity of molasses. All other kinds of provisions, as biscuit, flour, sugar, rice, salted meat, &c. were sold at a very high price, and only as a particular favour to persons who had some interest with the under overseers. Fresh fish, which might easily have been procured, was very seldom sought for, as the Promüschleniks were wanted to work upon the buildings, the fortifications, and other works necessary to the settlement.

In the beginning of the year 1806, very fortunately a great number of sea-lions and sea-dogs were taken; they furnished a supply of fresh food for some time, which was given to the workmen. Many Aleutians, who were not employed at work, fished to supply their own wants, and when they were fortunate enough to take more than was necessary for themselves, they bartered the superfluity with the Promüschleniks for cloaths; while the latter, tormented with hunger, were ready to give the last shirt, or garment of any kind, for fresh food: the consequence was, that at last many of them went about with no other clothing than a stinking dirty sheepskin full of vermin.

Fresh fish being such a rarity, about the end of January, a Kaluschian, who had formerly lived on the spot now occupied by the Russians, came down with his wife and a female relation to fish in this neighbourhood, already well known to him. He caught such quantities of excellent holybutt, that he supplied all the inhabitants with it; and exchanging his merchandize for shirts and other cloathing, became in a short time a very rich man in his way, and at the end of a fortnight returned home with his canoe full of garments of every kind: but even this example could not induce the overseers to spare the Promüschleniks and Aleutians occasionally from their other work, and employ them in fishing: these poor creatures were afterwards, no less than before, very scantily fed.

Many of these needy and diseased beings, who were kept daily to very hard work, were unfortunately in debt to the Company, and it not unfrequently happened, that when wholly exhausted, and lying on a sick-bed, they were driven to their work with blows. The consequence is obvious: they sunk one after another, wholly exhausted, a prey to the scurvy, and all work was in danger of being stopped. What shocked me the most under these circumstances, and really harassed my feelings, was, that while so large a portion of the people lay in this state of wretchedness, the directors and under-overseers, the clerks and their friends, the officers and their hangers-on, of their own authority sent the Aleutians out to hunt or fish, and fed sumptuously upon wild-ducks and geese, fresh fish and fish pasties, good bread, biscuit, sugar, rice, molasses, brandy, in short, upon whatever was afforded either by nature or the storehouses.

In the month of February, out of a hundred and fifty of the youngest and most healthy men that had been selected from the different settlements and brought hither, eight were already dead, and more than sixty were laid up in the barracks with their strength wholly exhausted, and full of scorbutic sores; the chambers in which they lay had neither stove nor chimney, and the windows were shut close and nailed down. The rooms were only warmed by the pestilential breath of such numbers huddled together; and to crown all, not the remotest idea of cleanliness prevailed among them. Besides all this, the workmen often came home in the evening wet through, perhaps covered with snow, and lay down upon the beds in their wet cloaths or sheepskins, or hung them up in the room to dry, without any one appearing to think of the pernicious consequences that might ensue.

The scurvy commonly shewed itself first by debility, listlessness, and melancholy; inflammatory spots, sometimes larger, sometimes smaller, then appeared on the legs from the knees to the toes, which in a short time turned to sores. Those who were thus afflicted were not required to work, but were set to mount guard day and night in the cold and wet: this was alleged to be necessary for the public security: for the love of their native country, these poor wretches were doomed to die in misery. It was a commonly received opinion that exercise was very salutary in the scurvy; the weakest among the sick were therefore dragged about by their comrades; and others, who had still some little strength left, were made to draw or carry heavy stones about the room.

To the honour of Lieutenants Schwostoff and Davidoff it must

here be added that they endeavoured by every means in their power to repress these abuses: the latter in particular was a real father to the sick, and was always ready to give them assistance with a degree of philanthropy rarely to be found; but the obduracy of the under-overseer, who often in the exercise of his power went beyond the limits prescribed him, exceeded all belief. The Governor Von Baranoff had resigned the supreme command to the plenipotentiary; and the latter being wholly unacquainted with the nature of such a trust, suffered himself to be led too much by a subordinate officer of the name of K-----, one of the most unfeeling men that ever existed, exceeding any thing ever drawn by Shakespeare in any of his characters; one to whom for the sake of humanity it were to be wished power should never be entrusted. The former Governor would sometimes make representations to the plenipotentiary, but in vain, and was obliged at last to conclude with---"Well, Sir, it must be as you, not as I please."

It must be confessed that christian love, sympathy, and participation in the sufferings of others, are ideas here absolutely unknown. Captain Dwolf, one of the most compassionate and benevolent of men, who often made me the sharer of his joys and sorrows, sighing one day over the numbers that were constantly dying, said to me: "It is indeed very extraordinary that Christians can practise so little philanthropy towards each other. The body of the Promüschlenik is thrown carelessly into the earth, and all ceremony of interment is waved with the Aleutian; we scarcely see a friend or a comrade following his deceased fellow-countryman to the grave. Funeral ceremonies, which under some form or other are practised even among

the most uncultivated nations, and which for the sake of example ought here to be performed with particular decency and decorum, seem to be things of which people have no idea."

Considering it my duty as a physician, I endeavoured to give the sufferers every assistance in my power; but my voice, as well as that of Lieutenant Davidoff, however raised against such abuses, was too weak to be heard. In vain did I entreat to have a dry, warm, airy, and clean apartment allotted to the sick, and pointed out a place where they would be tolerably well situated; in vain did I desire to have all the medical assistance afforded me that circumstances would permit. At length, when it could no longer be doubted, from the constantly increasing number of the sick, that the calamity was augmented by the close, dirty, damp nature of the place where the sufferers were heaped together, to remedy the evil, those considered as in the greatest danger were removed into a low, damp, cold hut, almost entirely open to the outward air; but still so little care and attention was paid them, that they were not even allowed wood for firing. When any one was removed hither, he always considered it as an infallible indication of being near his end; it was something of the same feeling as if a sick person yet living was carried to the church-yard. This picture may appear overcharged and improbable, particularly as it was manifestly the interest of the Company, if possible, to preserve the lives of the people and keep them in good health: but what motive should or could induce me to invent such a story? It was as little comprehensible to me as it will be to others, how any set of people could act in such a manner, equally inconsistent with their own interests and with humanity, and it would have given me much

greater pleasure if I could have entertained my readers with cheerful scenes, if I could have given them a picture of human nature under a more blooming and happy aspect.

Better food was as little to be obtained for the sufferers as a better lodging. Very often when I applied to the overseers for this purpose, representing that sugar, rice, molasses, and other wholesome kinds of nourishment, were of more importance to the sick than medicine, and that a wholesome liquor might be made for them to drink from the spruce-fir with molasses, they laughed at me, and said, "that must be a pretty doctor who would cure his patients with good eating and drinking, instead of medicine."

The situation of the settlement however became every day more and more critical; almost all the works were at a stand, and scarcely any of the Promüschleniks could be said to be free from disease: it became then absolutely necessary that some measures should be taken, if possible, to stop the progress of the scurvy. The under-overseers had however so abused the confidence which had been placed in them by the plenipotentiary and the governor, and for some months so wasted the stock of provisions, in making merry with their favourites, that even had the best disposition in the world been shewn to relieve the sick, the means were scarcely now to be obtained.

So many calamitous circumstances at length rouzed M. Von Resanoff, and he formed the plan of a new expedition to be undertaken by the Juno for procuring a supply of fresh provisions. The most northerly of the Spanish possessions in this

part of the globe, St. Francisco, on the coast of New Albion, was the place fixed upon for this visit: the Sandwich Islands might perhaps have been preferred for the purpose in an economical point of view, but political reasons led to the choice of St. Francisco.

As soon as the voyage was resolved on, the ship Elizabeth was dispatched to Kodiak to bring away the clergyman, that he might be placed at the head of the expedition, as M. Von Resanoff hoped, that, through his intervention, a better intelligence might be brought about with the religious Spaniards.

It were useless to enter more diffusely into the private history of the administration of the settlement: the reader must already have had enough of such scenes. I shall rather therefore now advert to some observations on Natural History made in a letter which I had an opportunity of sending from New Archangel, to my excellent friend and tutor, Counsellor Blumenbach, of Gottingen; the only time during my stay that such an opportunity of writing to Europe was presented me. I give the letter at length, hoping that it may not be without interest to the reader, and trusting that the venerable man to whom it is addressed will not find a re-perusal of the paper destitute of interest.

TO THE AULIC COUNSELLOR, PROFESSOR BLUMENBACH OF GOTTINGEN.

New Archangel, Norfolk Sound, on the N. W. coast of America.

February, 1806.

. . . . . The dreadful storm, which I mentioned in the last letter I had the honour of writing to you, is not to be compared to the more frightful moral tempests which it has since that time been my lot to encounter.

A blind zeal for Natural History, repeated promises both in writing and by word of mouth, of all possible support in the pursuit of my objects for the promotion of science, consequently the most pleasing prospects that could be presented to me, perhaps also a little titillation in Doctor Gall's organ of wandering, induced me to leave the expedition under the command of Captain Krusenstern, and to accompany the Ambassador Von Resanoff to the north-west coast of America. We left Kamschatka on the fourteenth of June, and arrived in Norfolk Sound on the twenty-sixth of August. Since that time, buried in this remote part of the new world, my only consolation has been to sigh and long for the old one. At our arrival, we found this new settlement of the Russio-American Company in want of almost all the necessaries of life.

My habitation is a miserable little chamber, with scarcely any furniture, and so far from being weather-tight, that in heavy showers the rain comes through directly upon my bed; nor have I even this poor apartment to myself; it is shared with me by a hunter. The principal light it receives is from

a lamp. I have my dinner, as well as all who are in the suite of the Plenipotentiary Von Resanoff, at the table of the superintendent of the settlement, M. Von Baranoff, who with an unusual hospitality has entertained us the whole winter through according to the best of his ability, without any remuneration on our part; and on the north-west coast of America this is no trifle.

If, however, I am disposed to eat at any other time, I find myself under the necessity of shooting crows, or seeking for muscles, or else of begging a piece of fat of whale or sea-dog. On several occasions, when, having bought a few pounds of ship-biscuit from the Company's warehouses, I could not help giving a part away among my hungry neighbours, if I came again to market too soon, I was reproached with prodigality *. Among other old stores sold since we came was a quantity of rye-flour which had been brought from Siberia, and had lain even perhaps for years in the Company's warehouses at Ochotsk, or Kodiak: the bread made from it was dry, black, bitter, and otherwise tasteless. The numerous crew of hunters, or Promüschleniks, and the Aleutians, are fed upon dried fish, berries, train-oil, and the flesh of whales or sea-dogs.

My principal occupation, as soon as I had settled myself, was to shoot water-fowl, in which I have found the double advantage that the flesh has served me for food, and that the skins are preserved as objects of Natural History. Happily for me,

* It is to be observed that every thing here was necessarily purchased upon credit, since there was no such thing as money in circulation at the settlement.

there was a tolerable supply of powder and shot in the magazines, though indeed sometimes it has not been without difficulty that I could obtain any, even by paying for it. At first I did not understand very well the nature of these things, and made my requests to the under-overseers with modesty and timidity: at length I began to assume an authoritative tone, and found myself by that means often in possession of objects which at first I had been positively assured were not included in the stores. Among the things obtained by this kind of bullying was a leather boat, or baidarka, without which I should never have been able to carry on my hunting and water parties to much purpose.

The many abuses which prevail here, the horrors of which, alas! I am condemned to be an eye-witness, the daily chagrins to which I am exposed, and which almost wear out both my spirits and activity, cannot, my most esteemed friend, afford you any entertainment, I shall therefore omit the detail of them, and rather proceed to such observations in Natural History as I have been enabled to make.

The climate is not so ungenial as might be expected at fifty-seven degrees of northern latitude;---about ten or twelve degrees by Reaumur has been the medium heighth of the thermometer throughout the winter. On the eleventh of January, 1806, which is the coldest day we have had during my stay, the thermometer was at sixteen degrees below the freezing point. Mr. John Dwolf, a citizen of the United States of America, who has passed the winter at the settlement, is much surprized at finding the cold less severe in Norfolk Sound than at Boston,

Rhode Island, and other provinces of the United States, which lie more to the south. The bay is always open to vessels, though the surface of some little creeks, entirely enclosed by hills or islands, are sometimes covered with a thin coat of ice. Frightful gales of wind are occasionally experienced, but they are never of long duration. Heavy showers of rain fall the whole year through, but very little snow; what there is falls from December to about March or April. Thunder-storms occur rarely in summer; they are more frequent in December and January. In the winter months the air is often so charged with electricity, that for many hours together in the darkest nights a bluish green electrical light, called St. Helen's, or St. Elm's fire, may be seen upon the bayonets fixed to the muskets, or upon the metal heads of the flag-staffs on the fortified hill.

There is no level ground of any extent in the neighbourhood of the settlement; on every side are steep and almost inaccessible hills covered with thick dark woods. But wherever there is any level ground, particularly if it be in a southern exposure, there is little doubt but that the spot would be capable of cultivation: some barley, which M. Von Baranoff sowed upon a small island, ripened extremely well, and potatoes thrive exceedingly. It is true, that there are many very hot days in summer, but the high hills, covered with wood, attract the clouds, which, falling in showers, entertain a constant moisture. Several attempts have been made by the governor to burn a part of the forests in the neighbourhood of the settlement, but owing to the great moisture, these experiments have never succeeded. In all the low parts are large and deep morasses.

The high hills consist, quite to the sea-shore, of a hard and fine-grained granite: some are pointed, rocky, broken, and naked; others are from the top to about half way down covered with trees, particularly the spruce-fir, *pinus canadensis*, and the balsam poplar or tacamahac, *populus balsamifera*. The woods and hills, on account of the broken declivities, and the number of fallen trees, are in many parts absolutely inaccessible. It is often a matter of the utmost astonishment to see the immense trunks of trees clinging to the rocks, on which there is scarcely the slightest covering of earth, throwing out their roots around, as if to hold themselves fast, and to seek for nourishment. Many of the trees measure a hundred and fifty feet in heighth, and six feet in diameter; they afford excellent wood for ship-building and masts. The natives make canoes of a single trunk: I have seen them fifty feet in length, four feet and a half wide, and nearly three feet high, so that they would hold thirty persons.

Many sorts of excellent berries grow here, and in great abundance, particularly the *murex nodus*, or American chesnut, and the *ribes nigrum*, or black currant. The season was so far advanced when I arrived, that, excepting some mosses in blow, I could not obtain any botanical treasures.

Of animals of the Mammalia class, there are whales, sea-dogs, sea-lions, sea, marsh, and river-otters, brown and black bears. The latter I have never been furnished with an opportunity of examining accurately; the size, however, and the nature of the skin, which I have frequently had the means of examining, lead me to consider the American black bear as of a species very different from the brown.

In my numerous shooting parties, the following birds fell more particularly under my observation.

Anas histrionica. This beautiful species of ducks first appeared about the end of September, and stayed in the Sound all the winter; they are very rapid in their flight, extremely shy, and are seldom seen in companies of more than four, or at the utmost six.

Anas perspicillata. These ducks, which are very rare in Europe, are also not to be seen till the end of September: they come then in great abundance and in large flocks. They fly in the evening out to sea, and in the morning send one or more of the most experienced to reconnoitre the part where they wish to pass the day, lest any snares should be laid for them. One or two of the flock also remain upon the surface of the water all day, as a sort of guard, while the greater number dive in search of food.

Anas glacialis. This is a species not common in Norfolk Sound, but abounding much at Kodiak: it breeds chiefly on that island, and on the peninsula of Alaksa. The harmonious trumpet-like noise of this bird distinguishes it from every other species of duck. It dives very deep under the water, and lives principally upon shell-fish: it draws in a large provision of air in diving, a small part of which it exhales from time to time, so that in calm weather, by the little bubbles which ascend from this emission of air, its course under the water may be easily tracked: it swims very fast, making very long strokes.

Anas bucephala. This is, according to my opinion, one and

the same duck with the *anas albeola* and *anas rustica*, in Gmellin's *Systema Naturæ*; it appeared in Norfolk Sound early in October.

Besides these, I saw great numbers of the following birds:

Anas boschas.
Anas marila.
Anas crecca.
Anas fusca, with several other sorts of ducks.
Colymbus auritus.
Colymbus arcticus.
Colymbus Grille.
Mergus Serrator.
Mergus Mergauser.
Pelecanus Urile.
Pelecanus Graculus.
Larus glaucus.
Larus marinus.
Alcedo Alcyon.
Corvus Stelleri.
Corvus an corax.
Tetrao Lagopus. The black bridle from the nose to the eyes was scarcely distinguishable.
Ampelis Garrulus.
Sylvia Troglodytes.
Strix nyctea.
Strix passerina.
Turdus nævius.

Of the *diomedea exulans*, or albatross, I saw some of a dark brown, others almost entirely white; the former I conjectured to be the young, the latter the old birds. They commonly appear in these northern parts in the greatest numbers about March and April, the time when the shoals of herrings chiefly come; they are particularly fond of these fish. The Aleutians call this bird *aglica*; their nests are not known by any of these northern nations. They have very great strength in their large bills, and make a noise not unlike the bleating of a goat or sheep. It is probably from hence that they are called by the French *moutons du cap*.

In February one of them was brought to me, upon which I could not discover the slightest wound. On inquiry how it was caught, I was answered, *by the hand.* Upon a farther investigation into the matter, I was assured by the Aleutians unanimously, that in the calms, which commonly succeed to a violent gale of wind, they cannot fly; if pursued by land they will run to the water, endeavouring to escape by swimming, but it is then easy to follow them with the baidarkas, when they may be taken with the hand, or killed by a spear or the stroke of an oar. They are commonly very lean when they first appear in the spring, but after banqueting a short time upon the herrings, grow fat, and are very good eating.

This bird was often seen by us, and has been seen also by many other seamen in the South Sea and between the tropics: the inference to be drawn from this circumstance, and from the fact that they are not known to make their nests any where excepting about Cape Horn, appears to be that they fly from the most southern regions of the globe to the most northern. It is not therefore difficult to comprehend, that a bird which never rests upon the waves of the sea during a storm, but skims their surface only as defying them, and delights in the most tempestuous winds, which chuses the frightful regions of Cape Horn as its favourite abode, which can bear the temperature of every climate, from the south pole through the hottest zone of the earth to the north pole,—it seems easily to be comprehended, I say, that such a bird, whose gigantic wings spread out to a breadth of ten or twelve feet, should not be able to fly in a dead calm.

Falco leucocephalus. This beautiful eagle, with a white head

and a white tail, is to be found here in the greatest numbers in spring, during the herring season, but in autumn it appears to migrate more to the south; single ones are, however, to be seen occasionally the whole year round. Though its favourite food is fish, it will also prey upon ducks, geese, and young sea-lions. The flesh is eatable: in the first year that the Russians were here they killed and eat above two hundred; I have sometimes, when pressed by hunger, eaten them myself, and found them not ill-flavoured. The entrails must be carefully thrown away: the liver is considered as very pernicious, it is even said by some to be poisonous.

These birds make their nests at Norfolk Sound, upon high trees, but at Oonalashka among the rocks: they are formed of twigs lined within with down feathers: the same birds appear to come to the same nest for several years successively. The eggs are about the size of a hen's egg. The Kaluschians make great use of the feathers of these eagles in their ornaments. On solemn occasions, and at their dances, they cover their heads with the down feathers, so that they look as if they were powdered after the European fashion; and they hold a wing or tail of the bird in their hands for a fan. The wing bones, particularly the *radus* and *ulna*, are used in illness as tubes for sucking up fluids.

The *hæmatopus ostralegus*, or oyster-catcher*, is not so common

* This bird is common on many parts of the coasts both of Asia and America: it is about the size of a crow, and has very red feet, whence it has acquired the name of *hæmatopus* blood-foot. It feeds on many kinds of shell-fish, but particularly on oysters, which it opens with great dexterity, and it has a way of indicating to other water-fowl by a particular cry where the prey is to be found. The flesh and eggs of this bird are a favourite food with the Icelanders.

here as at Oonalashka and some of the other Aleutian Islands. Its plumage is in all periods of its life, and at all seasons of the year, entirely black; excepting this I see no specific difference between the bird here and in Europe.

It is well known to you, my much valued friend, that at Lisbon and at Japan, I occupied myself very much with Icthyology; you will perhaps therefore be much surprized not to receive from me in the present instance a long catalogue of fishes. The principal reason is that I am surrounded by such a number of half-famished persons, that it seems scarcely right to withhold a single fish from being devoted to satisfying their hunger. I have not observed any particular species different from what are to be found at the Aleutian Islands: we have several sorts of salmon, holybutt, whitings, cod, and herrings; the latter come up into the Sound in April to spawn. At that time the natives lay a number of little rods of pine-wood smoothed over, with stones tied to them, under the water; among these the fish cast their roes, which, on account of its naturally slimy nature, sticks fast to them. When the rods are taken out of the water, smeared over with the roe, they have very much the appearance of coral: the roe is scraped off, and is considered as a great dainty, having acquired a pleasing flavour from the pine-wood.

The sea is very rich in productions of various kinds, *aphrodita*, *sepia*, many kinds of shell-fish, as *lepas*, *chiton*, *pholas*, *pinna mytilus*, with a number of *vermes*, *zoophytes*, *mollusca*, *medusæ*, *echini*, *asteria*, *spongia*, &c. &c. My friend and travelling companion, Counsellor Tilesius, who has studied this branch of Natural History so deeply, would have been here more at home than

myself. But how much soever I should have been gratified with preserving many of these objects for him, I must have abandoned the idea, even if I could have been supplied with spirits to preserve them, which was hardly to be expected, since the transporting them over land to St. Petersburgh would have been an expence beyond my means;---I even doubt whether it would have been possible to do it.

These cursory remarks from my miserable winter quarters will, I hope, be kindly accepted as a token of remembrance, and with my most sincere wishes for your health and happiness, I am, &c.

G. H. Von Langsdorff.

CHAPTER V.

Visits of the Kaluschians, the Original Inhabitants of Norfolk Sound, to the Russian Settlement.—Excursion to visit the Natives, and friendly reception experienced from them.—Their Habitation, and the Manner in which it is fortified.—Manners and Customs of the Natives.

IMMEDIATELY after the conquest of New Archangel, and the peace made in consequence of it, the Kaluschians retired, and fixed their abode in the north-east part of the Island of Sitcha, upon a high rocky point of land, in latitude 57° 46′ north, longitude 134° 40′ west. Notwithstanding that they lived ostensibly upon the most amicable footing with the Russians, and visited them from time to time at New Archangel, they thought it expedient to fortify their habitation to the utmost of their abilities, not feeling confident that their new friends might not seek also to drive them from thence. It was probably fear alone, the terror which had been inspired by the European artillery, and the power they saw that it gave the invaders over them, which made them assume an outward shew of friendship.

Their visits are commonly made in large companies of both sexes; they come in canoes, very neatly and ingeniously hollowed from the trunk of a single tree, and they always advance towards the Russian settlement singing and rowing to a measured time. When they have reached the landing-place they

stop, and one from the midst of them makes a long oration; nor do they attempt to land till Nanok, as he is called by them, that is the Commandant Von Baranoff, or somebody deputed by him, comes down to invite them on shore, and assures them that they will meet with a friendly reception. I was informed by the interpreters that these speeches are composed with method, and even rhetorically; they consist of long periods, the great art of which appears to be repeating the same thought over and over again under different words. "We were your enemies, we sought to do you injury, you were our enemies, you sought to injure us;---we wish to be good friends, we would forget the past, we no longer wish to molest you, forbear to injure us, be henceforward good friends to us." These orations will sometimes last half an hour.

When the proper assurances of friendship are given they venture on shore, and the commandant, who has studied their humours, orders a tent to be pitched for them, and a profuse dinner to be prepared. The chief alone, or the most distinguished among the guests, are permitted to come upon the fortified hill, the rest dare not think of it. It is astonishing how much, and what a variety of things these people will eat. They are very fond of rice, berries, the flesh and fat of sea-dogs, fish, &c, &c., but will not touch the fat or train-oil of whales, and always intreat that it may not be set before them. Though they would like brandy very much, they reject it because they see the effect that it produces, and are afraid that, if deprived of their senses, they should fall into the power of the Russians.

The Kaluschians are commonly of a middling stature, but

strong made; they have black hair and dirty complexions, which are rendered worse by the earths, the coal, and the different coloured ochres with which they besmear themselves. They do not appear to have the least affinity with the Mongol tribes; they have in general large fiery eyes, a small flat broad nose, and large cheek bones; indeed, in all respects, large and strongly marked features. The men have little or no beard, since, like the Aleutians, they pluck the hairs out by the roots as soon as they begin to appear. Some of the women and girls, who live chiefly with the Russian Promüschleniks, when their skins are clean, and purified from the dirt, which they consider as ornamental, have complexions as fair as those of many Europeans, and by no means unpleasing features.

The cloathing of these people is very simple, consisting of a covering round the waist, and an outer garment made of a piece of cloth, or skin, about five feet square, two ends of which are either tied round the neck, or fastened together with a button and button-hole. In latter years, since they have had so much intercourse with the people of the United States of America, they have obtained from them a sort of carter's frocks, made after the European fashion, of woollen cloth, so that it is no uncommon thing here to see Indians dressed like Europeans. Red and blue are the colours which they prize the most. These garments are, however, only worn in their visits to the town, or in severe cold; when employed in their domestic concerns, in felling timber, in fishing, in making canoes, &c. &c., they commonly go quite naked. Little children at the breast, though the cold is at eight or ten degrees, are scarcelycovered, having only some-

thing of an old rag or mat wrapped round them. It cannot but excite the astonishment of people accustomed to warmer climates or more cloathing, to see how much the bodies of these people are proof against cold; scarcely will any other nation be found where they are so hardened against the effects of a very rough climate.

The visits of the Kaluschians above described are almost always undertaken for purposes of traffick: they commonly bring with them sea-otter skins, which are presented to the commandant, and they desire to have in return presents to the same value, of such things as they want. If they are not contented with what is offered them, they take the skins already presented back again. I have observed on a former occasion, that the Russians cannot properly be said to carry on any trade with the Kaluschians. What I say here must not be understood as contradicting my former testimony, since the few skins that are procured in this kind of barter are not worth mentioning when the question is of trade in the gross.

These visits usually last some days, during which the visitors are entertained with eating, drinking, and dancing. It is only the men that dance, and in their preparations for it, which consist of painting their faces, and ornamenting their heads, as much time is spent as by any European lady at her toilette. The hair is powdered over with the down feathers of the white-headed eagle, *falco leucocephalus*, and ornamented with ermine: many regular figures are painted on the face with coal-dust, chalk, ochres, and cinnabar: these latter ornaments seem to supply the place of tattooing, which I never saw practised

among these people. Small looking glasses are become a necessary article to them for their toilettes, and numbers are brought here every year by the ships of the United States. Before they were acquainted with this invention, the people used to be *coëffeurs* to each other, since it was impossible for any one to paint his own face, or arrange the ornaments of his own head.

The dance itself consists chiefly in a very eager spring, in executing which the dancers scarcely remove at all from one spot. They are all barefooted, and wear a single garment only, commonly the woollen carter's frock mentioned above. One of the dancers seems, as it were, to lead the rest, carrying in his hand a thick sort of staff ornamented with the teeth of sea-otters; with this he strikes upon the ground to mark the measure. All, without exception, hold in their hands either the tail or wing of the white-headed eagle, or a piece of ermine. The latter is valued by them very highly as an article of luxury; they not only ornament their heads with it, and hold it in their hands, but sew it about their garments. The women sit upon the ground at the distance of some paces from the dancers, and sing a not inharmonious melody, which supplies the place of music.

The women never go naked; their whole bodies, and even their breasts, are at all times covered: many of them wear a sort of long shift, but their feet are always bare. They have the most extraordinary, it may be said the most unnatural, idea, of increasing their beauty, that the fertile imagination of man ever yet invented. It has been mentioned above, that the inhabitants of Kodiak and the other Aleutian Islands, are in the practice of slitting the under-lip parallel with the mouth, and

Engraved by Letitia & Eliz.h Byrne

The Kaluschians of Sitcha dancing.

introducing into the opening ornaments of glass-beads, muscle-shells, or enamel. The Kaluschian women carry this idea of ornament much farther. When a girl has attained her thirteenth or fourteenth year, a small opening is made directly in the centre of the under-lip, into which is run, at first, a thick wire, then a double wooden button, or a small cylinder made somewhat thicker at each end. This opening once made, is, by degrees, enlarged, till at length it will contain an oval or elliptic piece of board or sort of small wooden platter, the outward edge of which has a rim to make it hold faster in the opening. The women thus all look as if they had large flat wooden spoons growing in the flesh of their under-lips.

This ornament, so horrible in its appearance to us Europeans, this truly singular idea of beauty, extends along the north-west coast of America, from about the fiftieth to the sixtieth degree of latitude. All the women, without distinction, have it, but the circumference of the piece of board seems to mark the age or rank of the wearer: the usual size is from two to three inches long, about an inch and a half or two inches broad, and at the utmost half an inch thick; but the wives of the chiefs have it much longer and broader. I have even seen ladies of very high rank with this ornament, full five inches long and three broad; and Mr. Dwolf, who is very far from being likely to exaggerate, and who is well acquainted with all this part of the coast, from having so often traded hither for sea-otter skins, assured me, that at Chatham Street he had seen an old woman, the wife of a chief, whose lip ornament was so large, that by a peculiar motion of her under-lip she could almost conceal her whole face with it. It will be easily conceived, from this account,

to what a horrible and deformed size the lip must be extended.

To a very natural question which may probably be asked by my readers, what can be the reason for wearing such a hideous and inconvenient thing by way of ornament? I can give no answer. I can only enumerate many customs and habits among the most highly civilized nations, which perhaps, upon a comparison, are scarcely less laughable, scarcely to be any better accounted for, and ask why the Chinese women of distinction consider it a beauty to render their feet useless?---Why the married women of Japan blacken their teeth?---Why, when we would appear in great state, we rub the finest flour into our hair?---Why a more cleanly practice has never been devised than to carry the blowings of our noses about with us in our pockets?---Without therefore being able to say any thing as to the use of this lip ornament, one disadvantage that it has must strike everybody, that it is wholly impossible for the fair-sex, on the north-west coast of America, to receive a kiss.

From the first of my coming to Norfolk Sound I had always been inspired with a wish to gain a more accurate knowledge of the Kaluschians. This wish increased by degrees, till at length, about the end of October, I came to a resolution, notwithstanding the very natural enmity and hatred that these people bear the Russians, to visit them at their own principal habitation on the north-east side of the island, about a hundred and twenty, or a hundred and thirty versts from the Russian settlement. Though the commandant was of opinion, that on account of the victory lately obtained over these people, and the recollec-

tions so fresh in their minds of the Russian power, that such an expedition might probably be undertaken without danger, yet he dissuaded me from it, because he thought that we were yet too little acquainted with their character to make it prudent in other points of view; the same was urged also by the Plenipotentiary Von Resanoff. I had, however, myself no doubt of being well received, as Mr. Dwolf promised to accompany me, and he had become personally known to most of the principal chiefs during his cruise in Chatham Street and Prince Frederick's Sound the preceding summer. For my greater security, the commandant permitted me to take also in the party, as our interpreter, a Kaluschian woman from Norfolk Sound, who was living here among the Russians. She was the daughter of a chief now established at the new settlement, to which we were going: five years before, that is after the first conquest of Sitcha, when her countrymen rose in insurrection, and massacred their conquerors, she was spared by them, and restored to her parents. But at the second Russian conquest, when New Archangel was founded, she remained again with the victors, and was at our request very ready to take upon herself the office of guide in the expedition we had planned.

Before I enter upon the account of this expedition, it seems expedient to premise some cursory geographical observations. To the excellent navigator, Captain Vancouver, we are indebted for an accurate knowledge of the Archipelago, called King George the Third's Islands, lying in the fifty-sixth, fifty-seventh, and fifty-eighth degress of northern latitude, and the hundred and thirty-fourth, hundred and thirty-fifth, and hundred and thirty-sixth degress of western logitude. He,

however, only examined the coasts, determining the long extent of land to be an island, though it was impossible for him to become acquainted with every bay and creek by which it was intersected. I may therefore be permitted to add the following remarks. Mount Edgecumbe is not joined to the main land of the Archipelago, but is an island of itself, separated by a broad navigable channel, sprinkled with several islands, which unites the Bay of Islands, as it is called, with Norfolk Sound. This Bay of Islands, which lies in latitude 57° 35', leads to a spacious navigable strait, which runs from the north-east coast into Chatham Street. By this channel, which in many places is some miles over, the Archipelago of King George the Third's Islands is divided into two very considerable islands, and Chatham Street is united with the ocean.

It was at the mouth of this channel, on the north-east point of land, that the Kaluschians, on the loss of their possessions in Norfolk Sound, sought to secure themselves against future attacks of the Russians by erecting a sort of fortress; and it was this settlement that Mr. Dwolf and I had so great a curiosity to visit. We besides wished to examine the channel more accurately, since having been only recently discovered by the Russians and Aleutians, it was as yet but little known. Indeed, some amusement to interest our minds, and occupy our attention, was become the more necessary to us, since our great friends, our only companions and interpreters, Messrs. Schwostoff and Davidoff, had a few weeks before departed with the Juno for Kodiak, and we were consequently left almost alone.

We therefore commenced our preparations for the execution

of our scheme. Guns, pistols, powder, and shot, were taken for shooting, as well as for our safety; rice, tea, sugar, biscuit, dried fish, and brandy, for our food. We carried, besides, some kitchen utensils for dressing our provisions, a small tent as a habitation, axes for cutting wood, and several ells of linen and woollen cloth, with glass beads, needles, tobacco, large fishing-hooks, looking-glasses, and various similar trifles, as presents to the chiefs and other Indians. Thus fitted out, we were ready for our departure at four o'clock in the morning of the sixth of October. Through the kindness of the commandant, we were accommodated with three baidarkas, each having three seats. In one sat Mr. Dwolf, in another our Kaluschian woman, and in the third myself. We had each two Aleutians to row us, though we sometimes took a share ourselves in the labour, which we could do the more readily, as for several months we had been kept in practice through our numerous hunting parties.

The weather was clear and fine, and the cold only sufficient to make us row with more eagerness, in order to keep ourselves warm. We went round Mount Edgecumbe, and towards noon reached the mouth of the Bay of Islands, through which we had a view into the open sea, and then directed our course to the north-east. The channel we followed, which is navigable for large vessels, was at first broad and spacious; the shores were steep, in some parts rocky, and covered from top to bottom with firs. Though the ebb and flow was distinctly to be perceived, it was very inconsiderable. After we had proceeded about six versts, the shores began to approach much more towards each other, and soon presented to us only a very narrow

of our scheme. Guns, pistols, powder, and shot, were taken for shooting, as well as for our safety; rice, tea, sugar, biscuit, dried fish, and brandy, for our food. We carried, besides, some kitchen utensils for dressing our provisions, a small tent as a habitation, axes for cutting wood, and several ells of linen and woollen cloth, with glass beads, needles, tobacco, large fishing-hooks, looking-glasses, and various similar trifles, as presents to the chiefs and other Indians. Thus fitted out, we were ready for our departure at four o'clock in the morning of the sixth of October. Through the kindness of the commandant, we were accommodated with three baidarkas, each having three seats. In one sat Mr. Dwolf, in another our Kaluschian

strait, from which the water flowed out in such a very rapid current, that the rowers, notwithstanding all their exertions, could not bear up against it. The sun already began to decline, and the Aleutians advised us to go on shore for the night, and wait the turn of the tide, before we attempted to proceed. We accordingly approached as near as we could to the entrance of the strait, and at the distance of about a verst from it, to the south-east, found a convenient landing-place. Here, benumbed with the cold, and fatigued with the exertions of the day, our first cares were to cut down wood from the neighbouring forests, and to seek for fresh water. Having made a fire, and warmed ourselves, we proceeded to pitch our tent, and the kettle being put on, an excellent soup was made from the produce of our guns in the course of the day. I had shot a wild duck, *anas histrionica*, some sea-mews, and a large white-headed eagle. The first was now put into the kettle, and though somewhat fishy and lean, we all thought it excellent; the latter was preserved, in order to be stripped of the skin and feathers the first opportunity, as an object of Natural History.

While we were thus occupied, we saw a canoe with some of the natives rowing towards us. They proved to be a chief and his wife, with two other persons, all known to our interpreters: they had seen our fire, and were induced to come towards it, solely for the sake of society; they therefore entreated permission to remain with us, and this being granted, their tent was immediately pitched. It consisted of two poles forked at the upper ends, and stuck into the earth, with a third pole laid across within the forks. Against this a number of boughs of

trees, which they cut down, were stuck up, sloping towards the ground, and over them were laid thin planks, or bark of trees, which they had brought with them. This sloping wall of the half-open tent was turned towards the wind, and a large fire was made in front: by this contrivance, with the assistance of some coarse woollen cloth and skins, they were sufficiently protected from the weather during the night, though the cold was between two and three degrees below the freezing point.

Our interpretess soon gave us to understand that the chief had come principally in the hope of receiving presents, and recommended our giving him and his wife some leaves of tobacco, some needles for sewing, and any other trifles, as assurances of friendship. This was accordingly done, and the utmost satisfaction was immediately visible upon the countenances of our guests: we passed the night very amicably together, and the next day parted excellent friends.

Early in the morning the tide was favourable for pursuing our course, but scarcely had we approached the strait, when we found that it was impossible any longer to direct the canoe, for the stream was so rapid, that it was like going down a water-fall. The distance from one shore to the other, in the narrowest part, is not more than a hundred and fifty toises; the length of the strait may be from a hundred and fifty to two hundred paces; and the fall, according to our computation, must be five feet. It is free from rocks in the middle, but on each side are single rocks, which render the passage very difficult to ships. Notwithstanding this danger, which cannot be denied, the Russians have many times passed the strait

with vessels of more than a hundred and fifty tons burden. Mr. Dwolf, who is a very able and experienced seaman, assured me that he had never any where seen such a rush of water, and he considered it as extremely adventurous in the Russians to think of putting themselves and their ships to so great a hazard.

As soon as we had passed the strait, a widely-extended bason opened upon us, in which were many little creeks, islands, and rocks; the distance from one shore to the other could not in many places be less than from fifteen to twenty versts. The wind was north-east, and very much against us in rowing, so that we could not get on this day according to our wishes, and it was impossible to reach the place of our destination before night. We followed the shore to the east of us, and at length discovered towards evening, when we were seeking for a landing-place, and a spot on which we could take up our night's lodging, a smoke, that indicated the solitary habitation of a single Kaluschian: we made towards it with all possible exertion, that we might reach it before the night closed in. As we did not on our arrival see any one, I would fain have sent one of our Aleutians, who understood a little of the Kaluschian language, to the hut, but he, as well as our interpretess, told us that we must wait till we were invited by the owner. We remained therefore in our baidarkas till we were perceived by him, when he came and entreated us to land, and pass the night with him.

We found a small boarded hut, somewhat longer than it was broad, and covered with a thin coat of the bark of trees: in the midst was a large fire, at which we warmed ourselves very

comfortably. The door, and some little openings in the roof, were the only vents for the smoke, so that we seemed rather in a place for smoking fish or meat than a habitation: this resemblance was increased by the number of fish that were hanging about, and the total absence of all cleanliness. The chief, whose habitation it was, had a sort of recess directly opposite to the entrance, where he slept, and round about were several divisions made with beams for the other members of his family, and for the persons belonging to him, who were altogether fifteen in number. We had a place assigned us directly before the chief's apartment, and behind the fire, and after partaking of a repast, consisting of fresh fish cooked, and berries, we laid ourselves down, and enjoyed a very refreshing sleep.

On the following morning we testified our gratitude to our host by some presents, which appeared very acceptable. He offered us some sea-otter skins for sale, but we could not make a bargain for them, as we thought that we should have many more calls upon us for presents in the prosecution of our journey, and it was therefore necessary to be sparing of our articles of barter. I indeed regretted very much that I had not brought with me a larger provision of objects of trade, as I observed here also a very large bear's skin entirely black, the finest and largest I had ever met with, being between five and six feet long, and more than four feet wide. The lowest price that our host would have taken for it was five ells of English cloth. But since our future safety perhaps depended upon having the means of making handsome presents to the parents of our interpretess, and the other chiefs of the settlement, we could not

venture upon so expensive a purchase. Our stores were now all again put on board the baidarkas, and we had the satisfaction of finding that however needy some of these poor creatures might be, not the least attempt had been made to steal even the most trifling object.

The two shores of the channel here approached each other again, and we had scarcely left our night-quarters when we remarked in the east near the mouth of Chatham Street, where it became only some versts over, another habitation, which, from curiosity, we determined not to leave unvisited. We found in it a chief, by name Schinchetaez, who had been the adherent of the Russians from their first establishment in the country, and the only one among the whole race of the Kaluschians who had dared avow himself such: he had by this means rendered himself so odious to his fellow-countrymen, that they had separated themselves from him entirely, and he now lived here only with his own family, despised by them all. He received us very hospitably, and gave us with the utmost readiness a repast of fresh holybutt, inviting us to pass the night with him; we however thought it more adviseable to reach the settlement, if possible, that night, though we were still towards fifteen versts from it.

The wind and tide were now both against us, and the latter set with so much force into the mouth of the channel, that it was impossible, without the utmost exertion, to get through the remaining few versts; we had even the mortification of seeing the evening draw on before we had reached the place of our destination. To return was impossible, since our way was

entirely obscured by the darkness of the night, and to land near the settlement might have excited suspicion, for the fire, which was indispensably necessary to protect us from the cold, must inevitably have betrayed us; we judged it therefore upon the whole best to make our way to the settlement, though we could not reach it till the night was quite closed in. Scarcely was this resolution taken, when we were observed from the land, and repeatedly accosted with a loud voice, in a language wholly incomprehensible to us, probably with an enquiry, *Who is there?* but neither our interpretess, nor any one of the Aleutians, would answer, *Good friends.*

This perverseness was a source of great embarrassment to Mr. Dwolf and myself. I was on the point of expressing my anger pretty warmly, when an alarm-gun was fired from the shore, which at length moved our people to break their silence, and declare who we were. Almost at the same moment, while the echo still resounded among the woods and rocks, we observed a great movement on shore. Some hundred naked men armed with muskets, and others carrying large firebrands, thronged to the landing-place, a spectacle which did not make a very pleasing impression upon us, since we did not know whether we were to consider them as friends or enemies. We had no sooner made ourselves known, and brought up our baidarkas to the landing-place, than we were surrounded in a tumultuous manner by the Kaluschians, who *dragged* us, as it might truly be called, in the most literal sense of the word, with their hands over a short piece of low road, and constrained us to enter the fortress. We afterwards learnt that this is the highest testimony of esteem and respect they can shew to a guest. We

had not even time to order our Aleutians to take care of our effects, before a number of people had fallen upon them, whether with a view to plunder or not we were wholly ignorant. In this manner, accompanied by a number of torch-bearers, were we conducted to the top of a high rock on which the fortress stands: the ascent to it was rendered extremely fatiguing, by the number of large trunks of trees lying all about, some of which we climbed over, but others we were obliged to go round.

We were immediately introduced into the very spacious habitation of the Chief Dlchaetin, the father of our conductress, by whom we were received in the most friendly manner. He pointed out a place directly opposite the entrance to his hut, and before his own sleeping-place, where we spread the carpet we had brought with us, and then, by the light of a very large fire, which was burning upon a sort of hearth raised above the ground, in the midst of a large open space, were eagerly gazed at by some hundreds of the natives. What astonished us exceedingly was, that all our packages were immediately brought hither from the baidarkas, not the smallest trifle being withheld, although there was undoubtedly among them many things which the bearers must have wished very much to possess, and which, under favour of the darkness, might easily have been concealed. Mr. Dwolf, in the hurry of landing, had even neglected to bring with him his musket, pistols, and powder-horn, but they were all delivered to him, without having received the least injury.

We had scarcely refreshed ourselves with a dish of tea and a

glass of punch, which we had prepared, when we were invited by the most distinguished and eldest of the chiefs, the commandant of the fortress, to come and visit him. He received us with much kindness, presenting me with a sea-otter skin and Mr. Dwolf with a very beautiful sea-otter's tail; we soon returned back to the habitation of our host, as we were extremely wearied with our day's voyage, and wanted rest and sleep very much. While we were eating an exceeding good dish of fresh fish and rice prepared by him, we were entertained with a very lively and harmonious song, sung by a number of men who had seated themselves round the fire. I never regretted so much as on this occasion the little knowledge that I have of music, as I would very gladly have taken down upon paper so animated and pleasing a melody.

The night was cold and windy, notwithstanding which, some persons belonging to the family went barefooted into the neighbouring forest, and brought home large blocks of wood upon their naked shoulders. In this way, by degrees, such an immense pile was raised, that it is incomprehensible how the roof, covered as it is only with bark, escaped catching fire. The flame reached to the very top, and through the opening in it, which serves instead of a chimney, the sparks flew up into the air as if they had come from a smith's forge. We were so much alarmed, that our fears got the better of our weariness, nor could we sleep till the fire became less fierce and the imminent danger seemed to subside: it burnt, however, though less fiercely, the whole night through.

On the twenty-ninth we were surprized with the first snow

that had fallen this autumn. We this morning carried to the commandant, from whom we had received the presents the evening before, the counter-presents due to him. We, at the same time, made the proper tribute of presents to the parents of our interpretress, the latter having given us to understand that the sooner they were made the more highly they were esteemed. To her father was given some ells of woollen cloth, a large knife, some fishing-hooks, and some pounds of tobacco; to her mother a shift, some needles, a small looking-glass, some ribband, and some glass-beads.

As soon as we had performed these necessary ceremonies, we were permitted to walk about wherever we chose without being troubled with guides; I even killed some birds with my gun close by the fortress without the attention of the people being at all engaged by it. Perhaps this confidence was in great measure to be ascribed to Captain Dwolf's having, in the preceding summer, when he was at Chatham Street with the ship Juno, carried on a considerable intercourse of barter with the inhabitants, so that he had now many acquaintance among them; and seeing me with him, they took me also for an American.

The people of a great part of the north-west coast of America are called by the Russians Koloschians, or Kaluschians, but those of whom I am now speaking, call themselves G-tinkit, or S-chinkit, or also S-chitcha-chon, that is inhabitants of Sitki or Sitcha. Expelled from Norfolk Sound, they have fortified themselves here, upon a rock which rises perpendicularly to the heighth of some hundred feet above the water. The

only possible access to it is on the north-west side, and they have rendered this extremely difficult by strewing it all over with very large trunks of trees which they have cut down. The rock itself is secured against the attack of an enemy by a double palisade of large trunks of trees stuck close together, measuring from twelve to fifteen feet in heighth, and from three to four feet in thickness. A high natural wall of earth beyond the palisading, on the side towards the sea, conceals the habitations effectually, so that they cannot be discerned by any ship.

The houses within the fortress are in the form of parallellograms, of various sizes, placed in regular rows at some toises distance from each other. The roof, which consists of several layers of bark, rests upon ten or twelve thick posts driven into the ground, and the sides of the house are composed of broad thick planks fastened to the same posts. The entrance is at the gable-end, and is often painted with different coloured earths. The interior is extraordinarily dirty, as indeed are the people themselves. The smoke, the stink of fish and train-oil, the countenances besmeared with earths, coal, and ochres, and the lips of the women distorted by their wooden ornaments, with many habits that appear almost incredible, excite absolute repugnance and disgust: it is by no means uncommon to see the people seeking for the loathsome vermin that inhabit their dirty skin-garments, and carrying the living booty immediately to their mouths.

Age, superiority of natural understanding, or temporal wealth obtained by good fortune in catching sea-otters, and in selling their skins to advantage, or the great number of persons of

which a family consists.---these seem the requisites for obtaining respect and distinction among the Kaluschians. The proper designation of a chief among them seems to be the head of a numerous family; he exercises unlimited power over all the branches and members of it, they are his subjects, he lays his commands upon them, and punishes the disobedient. The common interest alone appears to have urged these men to shut themselves up in a fortress, as affording the most effectual security against the attacks of an enemy, but otherwise every family seems to live to itself alone; they will go out for weeks together on distant hunting or fishing parties. The family of the chief Dlchaetin, the father of our conductress, consisted of between thirty and forty persons, who lived all under the same roof. The whole number of people in the fortress might be between thirteen and fourteen hundred.

Single families, as well as single tribes, have contentions sometimes with each other. The inhabitants of the Archipelago of King George the Third, for instance, are often at variance with those of Admiralty Island, which lies to the eastward of them; but if attacked by a common enemy, suppose the Russians, they unite for their common defence. All private quarrels are decided by the right of the strongest; if in the contest any one be taken prisoner, he must serve as a slave to his conquerors till a price is agreed upon for his ransom; this is commonly fixed at a certain number of sea-otter skins.

Their principal objects of food are fresh and smoked fish, fish-roes, sea-dogs, and in spring and summer several sorts of sea-weed; the latter when cooked make a bitterish sort of

soup. They eat besides muscles, the *pinna mytilus* and *mya*, the *sepia* or cuttle-fish, and a sort of square cake made of the bark of the spruce-fir, pounded and mixed with roots, berries, and train-oil. Rice and molasses, which are brought them by the Americans, they consider as choice objects of *gourmandise*; instead of salt they use sea-water. Whale-fat they never eat; it seems from some prejudice to be forbidden to them: they shew the same kind of horror at it that a Jew does at the idea of eating swine's-flesh: they sometimes, however, bring large pieces of the whales that are occasionally cast upon their coasts to the Russian settlement for the benefit of the hungry Promüschleniks and Aleutians. Brandy, which is sometimes offered them by the Russians, they reject as a scandalous liquor, depriving them of their senses.

Next to hunting and fishing, constructing their canoes is one of their principal occupations. In their leisure hours they make wooden dishes, masks, and fishing-hooks; the fishing-lines are chiefly woven from a sort of dried sea-weed, which furnishes strings sometimes even twenty yards in length. Their arms consist principally of bows and arrows; but since their trade with the American States, they have acquired so large a stock of guns, powder, and shot, that they scarcely use their arrows except in hunting sea-otters and sea-dogs. Captain Dwolf assured me that the best English guns may now be bought cheaper upon the north-west coast of America than in England: if the lock be the least injured, as there is no one who can repair it, the weapon becomes useless to them: it has therefore been found very advantageous, in the latter years, to send a gunsmith with every vessel that comes to trade here, and buy up the useless

guns in one place, which are repaired and sold as new ones in another. The Kaluschians nevertheless understand the qualities of a good gun so well, that it is impossible to impose a bad one upon them: even the women are accustomed to the use of fire-arms, and often go out on the hunting parties. A principal employment of the women is to make a sort of carpeting of the wool of a wild sheep, which, to the best of my knowledge, is not yet included in any Natural History. These people are so expert in basket-work, that they weave a sort of basket of bark of trees and grass, which will hold water. In summer the women are very much employed in laying up winter stores, that is to say collecting berries, and cleaning the fish to prepare them for being dried.

The men are very fond of the dress of an European sailor with a round hat, they besides sometimes wear the sort of carter's frock above described, with ermine ornaments and the eagle's tail, but they have no other particular ornaments: they paint their faces. The women have their lip-platters, and are exceedingly fond of ornaments for the neck and ears, made of glass-beads and shells; the sea-ear, probably *haliotis iris*, seems to have been the shell most in request among them for making these ornaments, but of late years they have been brought in such numbers that they are exceedingly fallen in value. Another sort of shell, much prized by the Kaluschians, is the sea-tooth, *dentalium entalis*, called here *tache* or *keikwa*. On account of the great price given for these shells, the American seamen got a quantity of them imitated in porcelain in England, which were so well executed both as to form, size, and polish, that they had a perfectly natural appearance: the Kaluschians, however,

were not to be imposed upon; they detected the fraud, treated the pretended shells with the utmost contempt, and the speculation proved entirely abortive. The women also wear several bracelets upon their wrists of a sort of thick steel wire. The children's clothes have a number of rattling ornaments hung about them, particularly the Chinese brass money, which, having a hole through the middle, are easily sewed on: thimbles with a hole bored through the end and sewed on, are also a very favourite species of ornament. At first the sailors of the United States thought that the women of the north-west coast of America must have been the most industrious upon the whole globe, since they wanted such an amazing quantity of thimbles, till, at length, they discovered the use made of them. Little boxes, in which they keep their valuable ornaments and other little objects, are ornamented with sea-otters' teeth and small pieces of polished sea-ear.

The Kaluschians have commonly only one wife; a few among the chiefs, who are in their way very rich and substantial men, have two wives, an old and a young one. It is not uncommon when a young girl is grown up to shut her up, even for a whole year, in a small house by herself, at a distance from her family and acquaintance, where she is kept constantly employed: the idea is, that by this means she acquires habits of industry and diligence, reserve and modesty, which will afford the better chance of her becoming a good wife, and lay a solid foundation for wedded happiness. It is certain that industry, reserve, modesty, and conjugal fidelity, are the general characteristics of the female sex among these people, and form a most valuable distinction between them and the women of the more northern parts of the coast.

The manner of fishing here is well worthy of remark. To every line is fastened a small bladder, which floats upon the surface of the water, so that one person can attend to fourteen or fifteen lines at once. The climate on the eastern side of this Archipelago is more severe than on the western. I did not remark any particular species of stone except granite and a very fine sort of talc.

I could not learn whether these people have any idea of a Supreme Being. They shew a very particular respect to the dead. The corpse is laid in a new chest, and interred in a remote part of the forest, commonly between four trees forming a square. All severe diseases are ascribed to the sorcery of their enemies, and the root of a particular species of valerian is considered as the most effectual remedy that can be administered.

On the thirtieth, towards noon, we set out on our return, when we were presented by our host Dlchaetin with a considerable quantity of smoked salmon and other dried fish; these we accepted with so much the greater pleasure, as we were very ill supplied with provisions at New Archangel. We proceeded on this day no farther than to the habitation of the Chief Schinchetaez, with whom we had dined two days before. He was exceedingly glad to see us again, and gave us with great pleasure a very good supper and lodging for the night; we seemed as if we had been acquainted with each other for a long time. As soon as we had warmed ourselves, and satisfied our hunger, we distributed presents to our host and his family, which were accepted with warm acknowledgments, and a thousand apologies that their poverty would not allow of making us presents in return. The wife having in her possession a sea-

otter's tail, presented me with it, but almost at the same time begged another shift of me.

We slept by a large fire, which burnt almost the whole night through, in the middle of the hut, and on the thirty-first, at day-break, proceeded again on our voyage. Our attention was now engaged by a spectacle wholly new to us: a number of the Kaluschian men were running entirely naked over the ice, the cold being at eight degrees, down to the sea-shore to bathe. This we found to be an universal practice among these people: little children, a few days after their birth, are carried in all seasons and plunged into the sea; their scarcely half-clothed bodies are in this manner, from their earliest infancy, hardened against the severity of the climate.

The wind and tide were so entirely in our favour, that before evening we passed the narrow and dangerous strait, which, on the twenty-seventh, had made so forcible an impression upon us. It now appeared as if the water was boiling, and the wind being somewhat fresh, the foam was blown about like so much dust. Our baidarkas were carried through with amazing rapidity, at the rate of, at least, twelve knots in the hour, and we arrived happily on the other side, pitching our tent on the same spot where we had passed the night of the twenty-sixth. The weather was very cold, standing from six to eight degrees of Reaumur, and our principal business was to collect wood from the neighbouring forest, and make a good fire to warm ourselves. On the first of November we reached once more the Russian settlement in Norfolk Sound, all in high health and spirits.

CHAPTER VI.

Departure for New Albion.—Voyage thither.—Havre de Gray.—Cape Disappointment.—The River Columbia.—Attempt to run into it.—Continuation of the Voyage.—Arrival in the Bay of St. Francisco.

By the end of February eight out of the hundred and ninety-two Russians living at Sitcha had died, and sixty were disabled with the scurvy; preparations were in consequence at length begun for the long talked of voyage to New Albion. The ship was soon ready to sail, and although the ecclesiastics from Kodiak were not arrived, the anchor was weighed on the twenty-fifth of February old style, or the eighth of March new. All who were to share in this expedition quitted with joyful hearts the miserable winter abode to which they had been doomed, and by means of a favourable wind, before night set in, the hated Norfolk Sound was no longer in view.

Before I enter upon an account of this voyage, it will be proper to make some preliminary observations. The sailors of the Russio-American Company, as we have already said, consist of persons who were formerly in very different situations: these have been principally mentioned in this narrative under the name of Promüschleniks. They had been employed the whole winter through, at a small expense, in business of various kinds, and were now to return to the sea-service, after being

long wholly unaccustomed to it. Few of them were equal to the task, and most were in so diseased and ineffective a state with the scurvy, that Lieutenants Schwostoff and Davidoff evinced the utmost anxiety upon that account, and entreated to have only twenty men from among the most healthy in the settlement awarded them, though the ship Juno required at least thirty able-bodied seamen to navigate her properly. The representations however of these skilful officers were of no avail: notwithstanding the urgent reasons they alleged for requesting the twe .y men, they were refused, and instead of them, three-and-thirty others were appointed to the service, only eighteen of whom were really in any degree capable of going through it. The rest were in such a state of disease and debility, that, instead of being able to assist in the work of the ship, they wanted to be assisted themselves; at the same time they infected the air of the ship with their unwholesome breath, and consumed half the slender portion of provisions with which the vessel was stored.

Manned in this fashion, we put to sea: on the following day we had a fresh north and north-north-east wind, when most of the people on board, who had for a long time been unaccustomed to the sea, lay sick in bed. For the first days of our voyage, the weather was cold and clear, but soon after we perceived the pleasing effect of advancing into a milder climate; this was particularly grateful to our sick. So early as the third of March, when we were in latitude fifty-one degrees north, longitude a hundred and thirty-two west, the thermometer was at fourteen. The sea was little animated; we only saw some single peterels, albatrosses, and sea-mews. On the sixth, we

observed a phænomenon in the north-north-east, which very much resembled a water-spout. A black cloud approached the surface of the sea, from which a pillar appeared to rise perpendicularly, till it reached the cloud: whether this was merely an effect of the light, or whether it was really a pillar of water, we could not distinguish at so great a distance, as it was between three and four sea-miles from us.

On the following day, in latitude 48°, longitude 127°, we saw more birds than usual, and having but little wind, with perpetual variations, proceeded very slowly in our voyage. On the tenth, in almost a dead calm, an Aleutian leather canoe, which we had brought with us from Sitcha, was hoisted out, that we might make war the more easily upon a number of storm-birds, *procellaria grisea*, which had been flying about us for some hours. Our warfare was carried on with great success, and we made a considerable number of prisoners. In the evening of the same day the wind changed to south-south-east, accompanied by a drizzling rain, or wet fog, which continued for two days, producing a very bad effect upon our sick. On the thirteenth, the weather cleared again, and having a favourable north and north-west wind, we directed our course towards the River Columbia, which we expected to have been able to visit without any loss of time. This was very desirable, for the double purpose of recruiting our diseased crew, and examining more accurately a harbour, which it was conceived might be rendered of essential importance to the Russians inhabiting these coasts.

On the fourteenth, at day-break, the horizon being particularly clear, we had the pleasure of discovering the long-wished

for coast of New Albion. To the south were high chains of hills, to the north the land was low: directly in the east the landscape spread out to a considerable extent, being terminated in the back-ground by a very high round peak, covered with snow. This we conceived to be Captain Vancouver's Mount St. Helen's;---it lay in latitude 46° 9′ north, longitude 138° 4′ west*.

Even without any astronomical observations, we might have presumed ourselves to be in the neighbourhood of a great river, as the sea had a dirty, troubled, and reddish appearance, and the water was mingled with a considerable quantity of clay. We soon discovered Cape Disappointment in latitude 46° 20′, and the favourable north-west wind continuing, we expected soon to cast anchor; we had even already in idea eaten abundance of the wild ducks and geese, which came about us in great plenty. Our chief, Von Resanoff, had already sketched his plans for removing the settlement from Sitcha to the Columbia River, and was busied with building ships there in the air, when all our hopes and schemes were frustrated by the wind shifting suddenly to the south-east, and becoming so squally, with such a cloudy sky and thick atmosphere, that it was impossible to think any longer of running into an unknown harbour. Among the number of birds now about us, were, besides geese and ducks, pelicans, peterels, albatrosses, and sea-mews. Towards evening the wind abated, and we endeavoured, by carrying very little sail, to pass the night without varying much from our present situation, intending the next morning, as

* See Vancouver's Voyage, vol. 2, page 243.

soon as it was light, again to attempt making the mouth of the river.

The chains of hills which we had observed the day before, with one which rose very high above the rest, and which might have served us as a guide, were enveloped in fog, as well as the landscape in the fore-ground, and the green cape, partly covered with wood, which we had determined to be Cape Disappointment. The strong surf on the northern and southern points of land, the low woody coast to the south, the landscape stretching so far back, all had so much resemblance with the mouth of the River Columbia, seen the preceding evening, that nobody on board had any doubt upon the subject, and we endeavoured to make for the northern promontory. Near it we soon discovered a widely extended sand-bank, exactly as laid down by that skilful navigator, Captain Vancouver. As we could not very well sail round this bank, towards noon the anchor was dropped in seven fathom water, upon a firm sand, when, on taking an observation, we found to our no small astonishment that we were in latitude 46° 58′; it seemed to us altogether incomprehensible how the current of the sea could have carried us so much to the north. It is, however, highly probable, that our sleepy and dull Promüschleniks might in the night have steered in a wrong direction.

In order the more exactly to ascertain our situation, in the afternoon a sailor and two Aleutians were dispatched in a three-seated baidarka to take a more accurate examination of the harbour: I entreated permission to join the expedition, and having obtained the consent of the principals, took my seat in

the baidarka. When we quitted the ship, it was agreed that we should return at six o'clock in the evening at the latest, and that as night closed in, a lantern should be hung out upon the main-mast of the ship.

We followed at a proper distance the foaming surf of the northern point of land, and soon perceived the opposite southern coast, which formed the other side of the entrance. Between them was a passage of about a sea-mile in breadth, which, as far as we could see, appeared free from surf, and perfectly navigable. We therefore rowed directly eastward between the foam of the waves, which rolled over the bank on each side of us, towards the mouth of the haven. By the lead we found that we had about five fathom and a half water in the narrowest part of the passage, which, by degrees, as we got farther into the bay, increased to six, seven and a half, and nine fathom. At length, not till a little before six, we reached the inner shore, when, looking earnestly round me, I soon ascertained that the place I was examining was the Havre de Gray, described by Captain Whitby in Vancouver's Work*, lying in latitude 47° north, longitude 123° 53′ west.

Along the sandy shore lay on all sides large trunks of trees, and a desolate kind of country bounded by a green chain of hills, stretched inland about half a German mile. In a north-westerly direction, and in the vicinity of a wood, I saw smoke rising in several places, which plainly indicated that the country was inhabited. I therefore ascended a sand-hill near the

* See Vancouver's Voyage, Vol. 2, page 258.

shore, and fired my gun twice, with a view to attract the notice of the nearest inhabitants, and invite them to come down to us; but perhaps the distance was too great for the guns to be heard, as my experiment was not productive of any consequences. From the hill I had a tolerable view of the country round. The navigation between the sand-banks appeared broader than it is described by Captain Whitby, and the southern bason of the harbour more open, but the direction of the sandy shore may very likely be changed by storms and high tides since the visit of that navigator. On the southern side of the harbour there seemed to be safe and good anchorage, and the mouth of a small river. From the number of whales I observed here, I concluded that there must be a considerable depth of water, and abundance of fish. I saw vast quantities of sea-fowl and sandpipers, *tringae*. I was on shore at low water, and from the observations I made, I conclude the ebb and flow of the sea at the spring-tides to be very considerable. The north-eastern bay in the interior of the harbour, described by Captain Whitby, is almost entirely choaked up with sand. About twenty paces from the shore, where I landed, there was between four fathom and a half, and five fathom water.

It was already six o'clock in the evening, and the night was closing in very fast, so that I had no time to make a longer stay, particularly as it was expedient to work through the passage between the banks before dark; after which we should have to row about thirty versts farther, to reach the ship. A gust of wind or unfavourable weather might compel the commanders to weigh anchor, and our situation would not then have been very pleasant. Scarcely had we passed the farthest

surf when it became entirely dark, and the moon, on which I had relied for lighting us on our way, was completely overshadowed with clouds. At the same time a strong south-south-east wind rose, and the ship, partly from the darkness of the night, partly from the high waves, and the low manner in which our boat was built, was not to be seen. We therefore rowed with all our might towards the place where we supposed she must be, when about eight in the evening, the horizon being perfectly dark, we saw the flash of a cannon, though we were at too great a distance to hear the report.

This might truly be called to us a *feu-de-joye*, and being repeated every half hour, served to direct us in the right way. I answered the signal every time by firing our muskets, but learnt afterwards that the light was never once seen by the ship. We were as little able, on account of the rolling of the waves, to see the lantern hung to the main-mast of the ship, till we were within a very short distance of her. At length, about half past ten, notwithstanding the darkness of the night, the force of the wind and the waves, and being obliged to take a circuit to avoid the surf, we arrived safe and well at the ship, to the great joy of our companions: they had given us up as having become a prey either to the fury of the waves, or of the savages upon the shore.

Immediately after our arrival the anchor was weighed, and the wind being very strong, and in our favour, in seven hours we ran sixty-six miles and a half. The whole night through it blew from the south-south-east, and the next morning, the sixteenth, rose to a violent storm, which did not abate till

evening. A calm succeeding, we were exceedingly tormented with the pitching and rocking of the ship. The following days the same unfavourable south-south-east wind continued to blow, and prevented our advancing southwards. On the eighteenth, being in latitude 46° 40′, we saw several flocks, consisting of many thousand sea-birds; these, combined with a vast number of whales, made the sea quite alive; the latter were probably following the herrings in their usual peregrinations.

On the nineteenth the weather was cloudy, rainy, and foggy, and it was not till evening that the south-east wind, which had so long tormented us, began to abate: the horizon then became somewhat clearer, so that we could once more see the coast stretching to the east. In the south-east lay the hills which we supposed to be in the neighbourhood of the Columbia River: to the north-east, behind a long chain of hills, rose a lofty peak covered with snow, the highest point of which had a very irregular form, probably the effect of a former volcano. This was undoubtedly the Mount Rainier which Vancouver observed at the distance of a hundred geographical miles. We proceeded slowly forwards with a gentle wind, and had, early in the morning of the twentieth of March, the pleasure of being presented with a clear view of the pleasing country along the shore. To the east lay the coast of Shoal-Water, to the south-south-east the high hill which we supposed to be Cape Look-out, and between them the northern promontory at the entrance of the River Columbia, called Cape Disappointment. South-east of this lies a peak, the form and figure of which varies so much according to the distance, and the

direction in which it is seen, that it may very easily be mistaken by any one desirous of taking it as a mark. The walls of the crater, which are observable at its farthest point, form four pyramids, one of which often conceals another, so that sometimes two, sometimes three are seen, rarely one only, or all four.

To our very great sorrow we soon lost our favourable wind, and were once more driven to the north by a gentle south-east, and south-south-east wind, assisted by the currents of the sea. Towards evening a calm came on, and that we might not lose at night by the currents all the way that we had made in the day, towards seven o'clock Lieutenant Schwostoff cast anchor in twenty-three fathom water. Several sorts of whales sported round our ship, from some of which the spout of water was larger than I had ever yet seen. During the calm the clouds took a variety of directions, and the waves came strongly from the west, although for several days the wind had been in the south-east. We lay at anchor all night, and in the morning of the twentieth directed our course towards Cape Disappointment, with a light breeze from the west and north-west.

It was of no small importance to us to land if possible. Many of our sick, from the nature of their food on board the ship, and the want of proper antiscorbutic remedies, daily grew more and more diseased, so that our commanders considered it as an absolute duty to put into the first harbour they could reach with safety. No hope of restoring them seemed to remain, unless by the wholesome animal and vegetable productions that might

be collected on shore. We rejoiced therefore in the idea of having arrived in the neighbourhood of the River Columbia, and in order to avoid the strong breaking of the sea about the northern promontory, steered more to the south, where the smooth surface of the water led us to presume that there must be a good passage. Towards two o'clock we had doubled the high northern promontory, and towards five, to our great concern, we plainly discerned that the eastern horizon was marked by a violent surf, and that we had been driven by a strong current too near the southern cape called Cape Adams, having missed the passage. We were therefore obliged to cast anchor not far from the surf, in three fathom water, finding ourselves in the utmost danger of being stranded upon the sandy shore. As the wind almost at the same time increased exceedingly, Lieutenants Schwostoff and Davidoff held it more adviseable to get away as fast as possible from this shallow water, and to take every advantage offered by the continuation of the favourable north-west wind. They therefore represented to M. Von Resanoff that it was better not to lose more time, but to abandon the idea of running into the River Columbia, and sail away directly for St. Francisco, where we should be among civilized people, and should no doubt find plenty of provisions and every thing necessary for the recovery of our sick.

On the twenty-second, one of the many scorbutic patients we had brought from Sitcha died, and fifteen more of the Promüschleniks lay in so deplorable a state, that it seemed as if six or eight of them must inevitably perish if we did not soon reach some harbour. The continuance of the north-west wind was,

under these circumstances, a great consolation to us, and inspired every one with the pleasing hope of finding himself soon on shore in a more southerly and consequently milder climate. This prospect had the agreeable consequence that M. Von Resanoff thought he might venture to be less sparing of his stores, and gave the whole crew a good bowl of punch made with the brandy of the Russio-Americans, which I endeavoured to render as palatable as possible by the assistance of acid of vitriol and sugar. This beverage was universally admired, and those who were in health seemed to find it not less a comfort to them than those who were sick.

The next day we were, according to an observation taken at noon, in latitude 40° 58′, and towards evening could discern, in the clear south-easterly horizon, a high promontory, which we supposed to be Cape Mendocino. The sea was uncommonly dead, and scarcely even a bird was to be seen. As the night was closing in, we perceived, in the water near the ship, a sort of ribband-like object, perfectly clear and transparent, which had the direct form and figure of a snake: it was probably composed of a number of salpen or mollusca of a particular species, mentioned by Peter Forskal, as hanging to each other in so extraordinary a manner.

On the twenty-fifth a brisk south-east wind, with fog and rain, drove us back to the distance of about three miles farther from Cape Mendocino. This promontory and the declivities about it are high and steep; it was only in the rugged clefts and narrow vallies that any appearance of wood was to be seen. The lower hills were chiefly covered with a green turf, but we

did not any where observe smoke or other indications of inhabitants: it is indeed probable that the country is not inhabited, as the steep declivities appear to offer very little that can contribute to the support of man. This day about noon we observed, for the first time, large flocks of wild geese, going from the south towards the north. In the evening the wind turned again more to the west, which enabled us once more to pursue our course at a tolerable rate.

On the twenty-sixth we found ourselves in the neighbourhood of a low point of land which we saw in the south-east, and supposed to be Cape Barro de Arena: by our observation at noon we were in latitude 39° 18′: the weather was warm and dry, but the eastern horizon was for the most part enveloped in fog. Later in the day we could see, from time to time, a steep shore, in the back-ground of which were high mountains covered in some parts with snow. In the afternoon a golden winged wood-pecker, *picus auratus*, flew on board, seeming as if it hoped to find there a place of refuge; instead of that it found its death, since, on account of its beauty and rarity, we could not forbear sacrificing it, and preserving it as an object of natural history.

The wind freshened so much in the night, that it was judged prudent to take in some of our sails. Early in the morning we discovered to the south the cluster of rocks called *Los Fallerones*, and to the east the promontory of *Ponto de los Reys*, in latitude 37° 59′, near to which lies the harbour of St. Francisco. A current carried us at the same time two miles to the south. We now steered directly towards the harbour, and had the pleasure of finding Vancouver's charts and views so accurate,

that they left nothing to be wished for. The regular soundings may serve every navigator as a secure guide to run into the harbour even in the dark; we, however, held it more prudent to come to anchor for the night at the distance of between two and three miles from the mouth of the harbour, in four fathom and a half water; and on the twenty-eighth, at day-break, proceeded forwards to the place of our destination. Towards nine o'clock we reached the south-eastern point of the harbour, on which, while we were yet at a considerable distance, we perceived a fort. From this, as we approached it, we were hailed by means of a speaking trumpet, and asked who we were, and whence we came. In consequence of our answer we were directed to cast anchor in the neighbourhood of the fort.

CHAPTER VII.

Arrival at St. Francisco.—Reception there.—Presidency and Mission at St. Francisco.—Description of them.—The Indians of this Mission.—Their Manners and Customs.

We had scarcely reached our destination, on the morning of the twenty-eighth of March, after a voyage of thirty-two days, when we saw fifteen horsemen come out from the fort of St. Francisco, and advance in full gallop to the shore near where our vessel was lying. By calling and by signs they made us understand that they expected a boat from us to come on shore, and shewed great impatience while we were hoisting one out. Lieutenant Davidoff and myself went in it as plenipotentiaries from the ship.

We were received by a Franciscan monk, and several military officers, when a well-looking young man, who was no otherwise distinguished from the rest but by a very singular dress, was presented to us as the commandant of the place. He had over his uniform a sort of mantle of striped woollen cloth, which looked very much like the coverlid of a bed, his head coming through an opening in the middle, so that it hung down over the breast, back, and shoulders. He, as well as the rest of the military officers, wore boots embroidered after a particular fashion, and extravagantly large spurs; most of them also had

large cloaks. As not one of our party understood Spanish, the conversation was carried on, in Latin, between me and the Franciscan friar, this being the only medium by which we could make ourselves intelligible to each other.

The first question asked was who we were, and whence we came. We said that our ship belonged to a Russian voyage of discovery, and that the commander of it, the Chamberlain Von Resanoff, was on board; that our intention had been to go to Monterey, as the seat of government, but that owing to contrary winds and a scarcity of provisions, we had been under the necessity of putting into this harbour, as the nearest we could make; we therefore solicited the commander's permission to purchase the supplies we wanted, and do some necessary repairs to our vessel. To this we received for answer, that it was a long time since the commandant had received intelligence of this expedition, with an order from the King of Spain, that in case the ships should put into that port, they should be received in the most friendly manner, and be supplied with every thing they might want; that, in consequence, all kinds of refreshment which the country and the season afforded, should be entirely at our service. At the same time they observed, that, according to the information sent them, the expedition, when it sailed from Cronstadt, consisted of two ships, the Nadeschda and the Neva, the one commanded by Captain Krusenstern, and the other by Captain Lisiansky, and they wished to know what could have occasioned so great a change, as that the Chamberlain Von Resanoff (whose name seemed known to them) was now come with one ship only, and that neither of those abovenamed, and commanded by different officers.

To this inquiry we replied, that the original ships engaged in the expedition were, from a variety of circumstances, under the necessity of returning to Europe from Kamschatka, and that his Majesty the Emperor of Russia had ordered the Chamberlain Von Resanoff to remove on board the Juno, under the command of Lieutenants Schwostoff and Davidoff, for the purpose of visiting the settlements of the Russio-American Company upon the Aleutian Isles and the north-west coast of America, from whence he had proceeded to that port. With this answer they seemed perfectly satisfied, and begged the Chamberlain to come on shore, saying that they would wait there for him, and conduct him to the Presidency, into the habitation of the commandant. We returned immediately to the ship to communicate this agreeable invitation, and being joined by the Chamberlain and Lieutenant Schwostoff, proceeded with our guides towards the Presidency, as the military settlements in California are called. On our way thither, we were informed that the proper commandant, Don Arguello, was absent, and that his son, Don Louis Alferes Arguello, with whom we were then talking, supplied his place till his return. In somewhat more than a quarter of an hour we arrived at the Presidency, where we were received in the most polite and friendly manner by Madame Arguello, wife of the commandant, and her family.

The whole settlement of St. Francisco has the appearance of a German *Metairie*. The low wooden houses consist of one quadrangular room. The habitation of the commandant is small and mean. A sort of parlour, with only white-washed walls, very scantily furnished, and about half the floor covered

with straw-matting, served as the apartment for receiving company. After being heartily welcomed, we were presented with refreshments, and invited to partake of as good a dinner as their kitchen and cellar would furnish. It was not very long before it was served, and to our great surprize, considering the humble nature of the rest of the furniture, in as handsome a service of plate as could be seen: this costly American metal is indeed to be found in the most remote Spanish possessions. Friendship and harmony reigned in the whole behaviour of these worthy kind-hearted people; indeed, in such a spot, they have scarcely any pleasures or amusements but what proceed from family union and domestic cordiality.

The simple artless attachment which every part of this amiable family seemed to feel for the other, interested us so much, that we soon wished for a farther acquaintance with them, and were very desirous of learning the name of each individual. Madame Arguello had had fifteen children, of whom thirteen were at this time living; some of the sons were absent upon the military service, others were at home. Of the grown-up unmarried daughters, Donna Conception interested us more particularly. She was lively and animated, had sparkling love-inspiring eyes, beautiful teeth, pleasing and expressive features, a fine form, and a thousand other charms, yet her manners were perfectly simple and artless. Beauties of this kind are to be found, though not frequently, in Italy, Spain, and Portugal.

The son and *locum tenens* of the commandant, Don Louis Arguello, imparted to us the news that England had declared war against Spain, and told us, that when our vessel was first

seen, it was supposed to be an English one, and an enemy, but that they were extremely happy when they found their mistake. After dinner, he dispatched a courier to the governor at Monterey, to announce our arrival, and to request his farther instructions with regard to us; M. Von Resanoff also sent a few lines by him. Besides Father Joseph Uria, the Franciscan, who had received us at our landing, we were also introduced to Father Martin, and received from both an invitation to visit the mission of St. Francisco on the next day: this is an ecclesiastical establishment, lying at the distance of a short German mile, eastward of the Presidency. In the evening, we returned to the ship, much delighted with the day we had passed, when we received the pleasing intelligence that the commandant had sent so large a supply of refreshments, that there was sufficient to feed our poor diseased Promüschleniks for several days; among other things were four fat oxen, two sheep, onions, garlick, sallad, cabbages, and several other sorts of vegetables and pulse.

On the twenty-ninth, at eight in the morning, according to agreement, the horses were ready for us upon the shore, and Father Joseph Uria came himself to be our conductor. Messrs. Von Resanoff, Schwostoff, Davidoff, and myself, were of this party of pleasure. As we were to pass the Presidency in our way, we just called in to wish the worthy family of Arguello a good morning, and were regaled with chocolate, after which we proceeded towards the Mission. The road is bad either for horses or for walking, consisting almost every where of a loose sand. The surrounding country is in general naked, and the hills, covered in some parts with low shrubs, afford but

little variety. The birds were almost the only things to attract our attention; I saw several sorts unknown to me, besides eagles, cranes, curlews, ducks; there were also a few rabbits and hares.

In about three quarters of an hour we arrived at the Mission. Father Martin, to whom we had been introduced the day before at the Presidency, received us at the door with a third ecclesiastic, called Father Raymond, to whom we were presented; both gave us a very kind and friendly welcome. We were carried immediately to the church, where a short prayer was put up for us; after which we were shewn all that was thought deserving of attention in the chapel and sacristy; to say the truth, these curiosities consisted in little more than the ecclesiastical paraphernalia. Our cicerone, Father Joseph Uria, who was, generally speaking, an intelligent and well-informed man, and who seemed to have a sound and accurate judgment upon most subjects, understanding that I was a naturalist, took me by the hand when we were in the chapel, and made me take notice of a painting, which represented the *Agave Americana*, or large American aloe, from the midst of which, instead of a flower-stem, rose a holy virgin, by whom, as he assured me, many extraordinary miracles were performed in the sequel. This he related with an air of such firm belief in the story, that I could not help thinking if the belief was really not assumed, this was the greatest miracle the Virgin could have wrought. From courtesy, however, I joined in his admiration of the circumstance, expressing at the same time my extreme envy of the painter, who had seen so great a natural curiosity with his own eyes.

When we quitted the church, we were carried to the dwelling-house of the ecclesiastics, which consists of several very spacious apartments: here we were treated with a variety of refreshments, and this ceremony concluded, were shewn the rest of the buildings, with every thing belonging to the Institution, worthy of our notice.

The ecclesiastical institutions, to which are given the title of missions, have for their object the spreading of the Roman Catholic religion. In those established upon the peninsula of Old and in New California, there are commonly two or three monks*, who are supported in their military labours by the Presidency, that is to say, the military government of the country. Every one of these fathers, when he comes over for the purpose of converting the natives, must, before he quits Spain, enter into an engagement to remain in America ten years; after which he is perfectly at liberty to stay or not, as he chooses. In his voyage hither, as well as in his return, if that be his choice, he is maintained entirely by the Spanish government, and has nothing to think of himself but his Bible and Prayer-Book. None of these missionaries can acquire any property, so that the idea of enriching themselves can never divert their thoughts from their religious avocations: every thing they can save, or gain, goes into the chest of the establishment; they consequently return to their own country as poor as they left it.

The number of ecclesiastics brought every year from Europe

* Those established in New California are all of the Franciscan order.

to Vera Cruz amounts to about three hundred: each has an allowance of four hundred piastres annually, which is devoted to the support of himself and of the community to which he belongs. This sum is not paid in money: the amount is supplied in objects of necessity or utility, such as manufactured goods for clothing, household utensils, and the like. They are sent them by the Franciscan College in Mexico, on which all the Missions in New California are dependent, and they are shipped on board government vessels at the harbour of St. Blaise, on the north-west coast of Mexico. Among the principal objects are linen and woollen cloth, wine, brandy, sugar, chocolate and cocoa, iron tools, wax tapers for the churches, kitchen utensils, and implements for husbandry.

In the province of New California, which extends from St. Francisco, in latitude 37° 55′ north, to St. Diego, in latitude 32° 39′, there are at present nineteen missions, each of which contains from six hundred to a thousand converts. For the protection of them there are, if I mistake not, six presidencies, but they do not altogether contain more than three hundred cavalry.

The Mission of Santa Clara, which lies between St. Francisco and Monterey, is, with regard to its fine situation, the fertility of the soil, the population, and the extent of the buildings and grounds belonging to it, one of the largest and richest. All these missions have a great number of cattle and abundance of other productions necessary to the support of man, and the monks conduct themselves in general with so much prudence, kindness, and paternal care, towards their

converts, that peace, happiness, and obedience universally prevail among them. Disobedience is commonly punished with corporal correction, and they have only recourse to the military upon very extraordinary occasions; as for instance, when they go out in search of converts, or have any reason to apprehend a sudden attack.

The number of soldiers is so small that the use of which they can be seems scarcely answerable to the cost of maintaining an establishment for them. In the presidency of St. Francisco there are no more than forty, who have three missions under their protection; those of Santa Clara, St. Joseph, and one named after the Presidency, St. Francisco. There are seldom more than from three to five soldiers at a time at any mission, but this small number has hitherto been always found sufficient to keep the Indians under proper restraint. I was assured, by a person well deserving of credit, that the Spanish government does not expend less than a million of piastres annually upon the support of the missions in the two Californias, with the military establishments annexed to them, without deriving any other advantage from them than the spreading the Christian religion over countries where it was before unknown.

Every monk has several horses for his use, and when he goes out to make his excursions in search of converts, is accompanied by one or more soldiers. On these occasions the whole party commonly throw over their breast and shoulders a sort of short leathern mantle made of deer-skin. This is intended as a defence against the arrows of the Indians, which cannot pierce through the leather. At other times this mantle is employed as an object

of parade, and is worn by the soldiers on days of ceremony at the presidency or the mission. By a royal command, the ecclesiastics must not go to any distance from the mission without this mantle; as they must not carry about them any other weapons than the Bible and the cross, such a protection is very necessary. During breakfast we were entertained with the information above detailed, after which we were carried round to see every thing worthy of observation.

Behind the dwelling-house of the monks is a large court surrounded with houses. Here live the Indians of the mission, who are employed under the immediate inspection of the monks in a variety of useful occupations, as cleaning and combing wool, spinning, weaving, &c. &c. Their principal business consists in manufacturing a sort of woollen cloth for their own clothing. The wool of the sheep here is very fine and extremely good, but the implements and looms appeared of a very moderate kind, and as the ecclesiastics are the sole instructors of these people, who themselves know very little about the matter, scarcely even understanding the fulling, the cloth made is of a very ordinary quality.

All the girls and widows are in separate houses, and are kept to work under lock and key; they are only sometimes permitted, by their superiors, to go out in the day, but never at night. As soon, however, as a girl is married she is free, and lives with her husband in one of the villages of Indians belonging to the mission: these latter are called *Las Rancherias*. By such institutions the ecclesiastics hope to bind their converts more closely to the establishment, and spread their religion

more securely and extensively. About a hundred paces from the buildings, properly called the Mission, lies one of these villages, or barracks for the Indians, which consists of eight long rows of houses, where each family lives entirely apart from the rest. The number of converted Indians at this mission is about twelve hundred.

Their principal food is a thick soup made with meat, vegetables, and pulse. This is portioned out three times in the day, morning, noon, and evening, in the quantity of about a German measure to each person*. At the hour of eating, every family goes with a vessel of some kind to the kitchen, when as many measures are served to each person as there are persons belonging to it. I was present at the time of delivering out the soup, and it appeared to me incomprehensible how any one could three times a day eat so large a portion of such nourishing food. According to what we were informed by our cicerone, between forty and fifty oxen are killed every week for the community, besides which, meal, bread, maize, pease, beans, and other kinds of pulse, are distributed without any stated allowance†.

After satisfying our curiosity at the Indian village, we saw several other useful institutions for promoting the industry and economy of the settlement. Among them was a building for melting tallow, another for making soap, workshops for lock-

* About three English pints.

† On account of the scarcity of fish here, or the want of proper means for catching them, these missionaries have a particular dispensation from the Pope for eating meat on fast days.

smiths, and all kinds of smith's work; for cabinet makers and carpenters;---magazines for storing up tallow, soap, butter, salt, wool and ox-hides, all of which are articles of exportation; with store chambers for corn, pease, beans, and other kinds of pulse. When one thinks that in this way two or three monks take upon themselves a sort of voluntary exile from their country, only to spread the Christian religion, and to civilize a wild and uncultivated race of men, to teach them husbandry and various useful arts, cherishing and instructing them as if they were their own children, providing them dwellings, food and clothing, with every thing necessary for their subsistence, and maintaining the utmost order and regularity of conduct;---when all these things, I say, are considered, one cannot sufficiently admire the zeal and activity which carries them through so arduous a task, or forbear wishing the most complete success to their undertaking.

At dinner we were regaled with an excellent soup of pulse and vegetables, with roasted fowls, a leg of mutton, different vegetables dressed in various ways, salad, pastry, preserved fruits, and many very nice sorts of food, the produce of the dairy. All these were things to which our palates had been so long strangers that we were not a little gratified with them. The wine, which was the production of the country, was but of an ordinary quality. Soon after dinner we were served with tea, which was about upon a par with the wine, but that was succeeded by super-excellent chocolate.

These important matters concluded, we were conducted to the kitchen garden, which did not answer my expectations. There was nothing in it but some sorts of pulse and culinary vegetables, with a few stunted fruit trees, which scarcely bore

any fruit, and most of the beds were overgrown with weeds. The north-west winds, which prevail so much on this coast, and the dry sandy nature of the soil, are insurmountable obstacles to horticulture: the only things that grow well in the gardens are asparagus, cabbage, several sorts of salad, onions, and potatoes. In some fields, tolerably sheltered from the wind, pease, beans, Turkish corn, and other pulse are cultivated, and thrive pretty well. Corn is here less productive than in some other parts of New California; notwithstanding this, the Spanish government thought it expedient to establish a mission in the neighbourhood of so excellent a harbour as that of St. Francisco, with a presidency for its protection: it is certainly justified, since both establishments are in a flourishing condition, principally from the great number of cattle they are enabled to breed.

In order to give a more accurate idea of the degree of fertility experienced in this soil, I will mention the comparitive quantities of seed sown, and corn produced for four successive years, as related to me by Father Martin.

Sorts of grain.	1802.		1803.		1804*.		1805.	
	Seed sown.	Produce.	Seed sown.	Produce.	Seed sown.	Produce.	Seed sown.	Produce.
	Measures	Measures.	Measures.	Measures.	Measures.	Measures.	Measures.	Measures.
Wheat	233	2332	201	1457	229	938	173	2622
Barley	108	1289	122	1720	143	826	195	2414
Pease	12	525	11	509	9	344	8	330
Large beans	6	132	7	214	8	206	8	294
Beans	2	10	1	60	2	30	3	40
Maize or Turkish corn.	1	20	2	60	1	156	1½	100

* In the year 1804 a great part of the seed withered in the ground, on account of the extreme drought.

Although we acquired but a slight knowledge of the Indians of this mission at our first visit, yet I will here throw together all that I learnt concerning them, and all the observations I made upon them during the whole of our stay.

The Neophytes of St. Francisco are the original inhabitants of these and the neighbouring parts. A few of them come from the mouth of a large river which flows into the northernmost part of the harbour, and some from the neighbourhood of Port Bodega, a harbour lying to the north of St. Francisco. All these people, who inhabit the coasts of New California, are divided into a number of tribes, under the names of Estero, Tuiban, and Tabin. Some other tribes, which lie more inland, to the east of these, and who lived formerly in constant enmity with them, were described to me by the names of Tscholban and Tamkan.

The former are a sort of Nomades, having no settled habitations: they feed in part upon fish, sea-dogs, shell-fish, and other sea productions, partly also on the produce of their hunting parties, and upon seeds, roots, and berries; the latter they consider as the greatest dainties. Their habitations are small round huts of straw in the form of a cone, which are erected when they come to any place, and when they remove are burnt; they are also burnt when any person dies in one. Both sexes go nearly naked, excepting a sort of wrapper round the waist, only in the coldest part of the winter they throw over their bodies a covering of deer skin, or the skin of the sea-otter. They also make themselves garments of the feathers of many different kinds of water-fowl, particularly ducks and geese,

bound together fast in a sort of ropes, which ropes are then united quite close so as to make something like a feather skin; it is the same on both sides, and so warm that it would be an excellent winter garment for a much colder climate. In the same manner they cut the sea-otter skins into small strips, which they twist together, and then join them as they do the feathers, so that both sides have the fur alike: they are principally worn by the women, very rarely by the men.

These Indians are of a middling, or rather of a low stature, and of a dark brown colour approaching to black. They owe this complexion very much to their dirty habits, to the power of the sun's rays, to their custom of smearing their bodies over with earth and coal-dust, and the little covering they wear. They have large projecting lips, and broad flat negro-like noses; indeed, many of their features, as well as their physiognomy, and almost their colour, bear a strong resemblance to the negroes. Their hair is, however, extremely different, being long and strait; if left to grow, it will hang down even to the hips, but they commonly cut it to the length of four or five inches, sticking it out like bristles; this has a very disagreeable appearance in the eyes of an European: the hair grows very far down towards the eyes, so that the forehead is extremely low; the eyebrows are small and the beards thin; many shave them close with muscle-shells. None of the men that we saw were above five feet high; they were ill-proportioned, and had such a dull heavy negligent appearance, that we all agreed we had never seen a less pleasing specimen of the human race.

Their weapons consist of bows and arrows, and as these con-

tribute essentially towards procuring them a great part of the necessaries of life, the making them seems a principal object of their talents and industry. The bow has a pleasing form; it is of wood from three feet to four feet and a half long, neatly wrought, and drawn together very ingeniously with the tendons of deer. This keeps the wood tied very fast, and gives it so great an elasticity, that very little power and dexterity is requisite to draw the arrow. The latter, as well as the bows, are neatly worked, and are pointed with vitrified lava, or obsidian, which is let into the shaft, and bound fast with tendons. The Spaniards had, in the times when they first invaded the country, great reason to deprecate the address of the Indians in shooting with the bow and arrow.

Among their household utensils, I observed baskets made of the bark of trees, very ingeniously woven together, and so firm and water-tight, that they would hold any kind of liquid, without its oozing out in the smallest degree. They even, besides, make use of them as roasters, putting into them corn or pulse, and drawing them quick backwards and forwards over a slow charcoal fire, so that every grain, like our coffee, gets thoroughly browned, without the basket being the least injured. Many of these baskets, or vessels, are ornamented with the scarlet feathers of the *oriolus phœniceus*, or with the black crest feathers of the crested Californian partridge, *tetraonis cristati*, or with shells and beads.

However dull and heavy, however ugly and dirty these people appear, yet they have a great fondness for sports and ornaments. The latter are made chiefly of shells and feathers.

Among the shells principally used is a sort of sea-ear, probably the *haliotis gigantea*, which abounds on these coasts, particularly in the neighbourhood of Monterey, and which, in the brilliancy of its colours, is scarcely inferior to the *haliotis iris* of New Zealand. Of another sort of shell, which I never saw entire, they make small rings, which are kept with astonishing accuracy to the same size, and bore them through the middle without the assistance of any kind of iron instrument. These rings are strung together to make necklaces, and have very much the appearance of our glass-beads.

The finest ornament for the head consists of the two middle tail-feathers of the golden-winged wood-pecker, *picus auratus*, the shafts of which are by nature of a very bright vermilion colour. They are stripped to within about an inch of the end, and then laid regularly one over the other, and bound fast together, so as to form a sort of bandeau for the head, which produces a very good effect. Among other curiosities which I procured from these people in exchange for glass-beads, ribbands, knives, and other European objects, was one of these bandeaus, which consisted of four hundred and fifty feathers, consequently two hundred and twenty-five birds were required to make it. I could not imagine or learn how these people could have procured so large a number, since it is a bird which inhabits only very woody parts, and there is very little wood indeed in the neighbourhood of St. Francisco. Another head-dress, which is usually worn by these Indians at their dances, is made of the feathers of a vulture very common in these parts, the *vultus aurea*. The tail and wing-feathers are woven together in a manner that very much resembles a Turkish turban.

Tattooing is also used, but principally among the women. Some have only a double or triple line from each corner of the mouth down to the chin; others have besides a cross stripe extending from one of these stripes to the other; and most have simple long and cross stripes from the chin over the neck down to the breast, and upon the shoulders.

Among all their amusements there is none in which they take so much delight as their dances, but of these I shall speak more particularly hereafter. Another of their pastimes, which they call *tussi*, consists in a number of them sitting together in a circle, one of whom has a little stick in his hand. This he conveys secretly from one hand to the other with a variety of gestures, singing all the time. When he thinks he has twirled and twisted it about so that his companions cannot know which hand it is in, or whether it is in either, as he perhaps conceals it somewhere else about him, he turns suddenly to one of the company with both his fists doubled, and looking at him stedfastly, utters a loud *ha!* This man is then to guess where the stick is: if he guesses right, he is to take it, and play with it in like manner; if he does not guess, a loud laugh is raised against him by the whole company.

When it is observed that two or three monks, and four or five soldiers, keep in order a community of a thousand or fifteen hundred rough uncivilised men, making them lead a wholly different course of life from that to which they had been accustomed, without any spirit of mutiny or insurrection appearing among them, it must be supposed that the cause is to be found principally in the mildness and forbearance with which they are treated, in the paternal care and kindness extended towards

them. I must, however, also attribute it in a great degree to the extreme simplicity of these poor creatures, who in stature no less than in mind are certainly of a very inferior race of human beings: I believe them wholly incapable of forming among themselves any regular and combined plan for their own emancipation.

Although it must be generally allowed as an incontrovertible fact, that a moderate climate is the most favourable to the human species, and that the mild regions of the globe are those which nature has pointed out as the most preferable for them to inhabit, yet here we find a very striking exception to the general rule. On this western coast of North America, in the thirty-eighth degree of latitude, where the original inhabitants live in a very mild and benignant climate, where they have no want of food, and little care about habitations or clothing, where without any irksome degree of toil they can procure flesh, fish, and vegetables, of various kinds in great abundance,---these people are, notwithstanding, small, ugly, and ill-proportioned in their persons, heavy and dull in their minds. On the contrary, several other tribes upon the same coast, as for example, the Kaluschians, in the fifty-eighth and fifty-ninth degrees of latitude, are strong, well made, and handsome, possessing so much acuteness of mind, that by their address they have often foiled both the English and the Russians. I freely acknowledge that the phenomenon of these pigmies in so mild a climate, where they have such plenty of food, is to me wholly inexplicable.

But I return to the ecclesiastics of the mission. They are properly only the stewards who are to provide for the mainte-

nance and instruction of these neophytes. The works in which the latter are principally employed are husbandry, tending the cattle, and shearing the sheep, or in mechanical trades, as building, preparing tallow and soap, or making household utensils; also in the transport of provisions, and other objects of necessity, from one mission or presidency to another. The most laborious employment, which is grinding the corn, is left almost entirely to the women: it is rubbed between two quadrangular oblong stones till ground to meal; the bread made of it is very white, but hard and heavy. The excellent and friendly La Perouse, with a view to lessening the labour, left a hand-mill here, but it was no longer in existence, nor had any use been made of it as a model from which to manufacture others. When we consider that there is no country in the world where windmills are more numerous than in Spain, it seems incomprehensible why these very useful machines have never been introduced here; I learnt, however, that in preferring the very indifferent meal produced by the mode of grinding above mentioned, the good fathers are actuated by political motives. As they have more men and women under their care than they could keep constantly employed the whole year, if labour were too much facilitated, they are afraid of making them idle by the introduction of mills.

The cattle, horses, and sheep, do not require any particular care and attention. The herds are left out in the open field the whole year through, and only a sufficient number are kept in the neighbourhood of the establishment to serve their immediate wants. When a supply of cattle is wanted, some of the converts and soldiers are sent out into the fields on horse-

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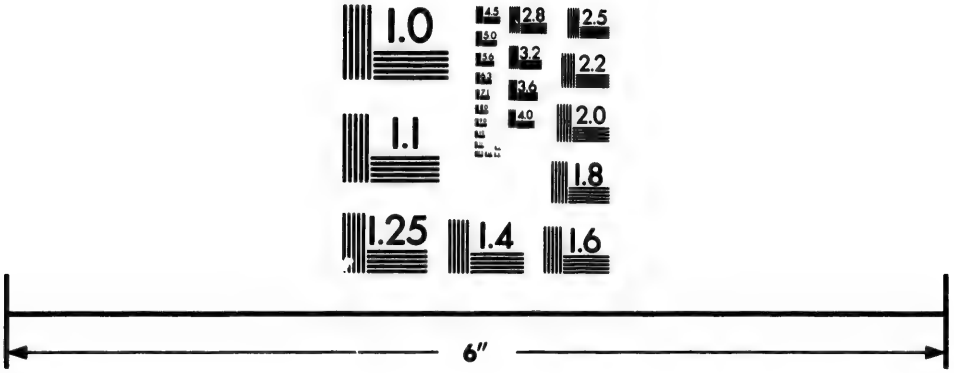

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back, and with slings, which they throw very dexterously, they catch by the horns the number required.

The immense herds of cattle now to be seen in these parts spring from five head which were brought hither by the mission in the year 1776. The Governor of Monterey, with whom we became acquainted during our stay, assured me that the number had been so great during the latter years in the missions of St. Francisco, Santa Clara, and Santa Cruz, that some months before he had been under the necessity of sending out a party of soldiers, who had killed no less than twenty thousand, as he began to be afraid that from the immense increase of them, there might in a short time have been a want of sufficient pasture for their support.

All the husbandry work is performed by oxen: the horses are kept for the military service and for the use of the ecclesiastics, or for the transport of provisions and other objects from one mission to another: in the latter service some mules are also employed. The carts and waggons are of a very ordinary make: here, as in Spain and Portugal, block-wheels are used, which are very often far from being a perfect round.

Neither the government or the monks have any other view than that of spreading the Christian religion, and it might consequently be supposed that the Indians, to whose maintenance and instruction all their cares are devoted, must be much happier in their present state of comparative civilization than they were before; the rather, since they are permitted to retain their former habits and customs, as far as they are not inconsistent

with their new religion. In their dances, their amusements, their sports, their ornaments, they are freely indulged: they have a little property of their own in fowls and pigeons, and are seldom refused when they ask permission to go hunting or fishing: on the whole they are much more free from cares than in their natural state. Notwithstanding all this, an irresistible desire of freedom sometimes breaks out in individuals. This may probably be referred to the national character. Their attachment to a wandering life, their love of alternate exercise in fishing and hunting, and entire indolence, seem in their eyes to overbalance all the advantages they enjoy at the mission, which to us appear very great: the consequence is, that every now and then attempts at escape are made. On such occasions, no sooner is any one missed than search is immediately made after him; and as it is always known to what tribe the fugitive belongs, and on account of the enmity which subsists among the different tribes, he can never take refuge in any other (a circumstance which perhaps he scarcely thought of beforehand), it is scarcely possible for him to evade the researches of those who are sent in pursuit of him. He is almost always brought back again to the mission, where he is bastinadoed, and an iron rod of a foot or a foot and a half long, and an inch in diameter, is fastened to one of his feet: this has the double use of preventing him from repeating the attempt, and of frightening others from imitating him.

After we had been shewn all over the mission, and had made an acquaintance with the ecclesiastics and the inhabitants, we returned towards evening to the presidency, deeply impressed with gratitude for the kind reception and polite attentions we had received.

CHAPTER VIII.

Restraints upon Trade.—Motives for our being well received by the Spaniards.—Articles of Trade.—Answer of the Governor.—Further Transactions.—Arrival of the Governor at St. Francisco.—Attempt at establishing a commercial Intercourse between Russia and New California.—Amusements.—Hunting.—Societies.—Dances.—The Barrego.—Bull and Cock Fights.—New Plan of Trade.—My own Opinions upon this Subject.

THE Spanish Government is well known to be extremely suspicious, and, properly speaking, does not allow the vessels of other nations to run into any of her ports in either North or South America. If, however, a foreign ship is obliged to put in from want of water, wood, or other necessaries, or from damage received in a storm, immediately on its arrival a guard is sent on board, the ship is examined, and if the circumstances do not appear pressing, the assistance asked is sometimes refused. All kinds of trade or barter for things which have not passed through the Spanish Custom-house is strictly forbidden, under pain of confiscation of the goods; tobacco, in particular, which is considered as crown property, is obliged to pay a very heavy duty. The American ships are guarded very strictly, and the freedom of all the sailors who are not native Spaniards is so extremely restrained, that none can come on shore without particular permission. Even the English, in Vancouver's most amicable expedition, were equally restrained, and we

should most likely have experienced the same treatment, had we not made use of the orders given by the Spanish Government relative to the expedition under Captain Krusenstern.

It was to this circumstance alone that we owed our friendly reception, and being suffered to remain without any examination. At length, when we hoped that the good-will of the ecclesiastics, Father Joseph and Father Martin, was entirely gained, we ventured to disclose the distresses of the Settlement at Sitcha, which was the real occasion of our visit, and to propose an exchange of many objects we had brought with this view, for a supply of corn, and other articles of the first necessity to us. But however willing the fathers were to comply with our wishes, they were afraid of venturing upon any kind of traffic, without the consent of the government. They assured us that they had no doubt of obtaining this consent, and expressed much satisfaction in the prospect of being able by this means to supply themselves with many European articles, of which they were greatly in want. They had heard that there were many things on board our ship which would be of the utmost use to them, and while they were waiting for the governor's answer, they came to visit us and our merchandise, accompanied by Don Louis Arguello. They were much pleased with some coarse and fine linen cloths, Russian ticking, and English woollen cloth, which we shewed them. They inquired very much after iron and iron wares, particularly tools for mechanical trades and implements for husbandry, household utensils, shears for shearing the sheep, axes, large saws for sawing out planks, and iron cooking vessels. Copper kitchen utensils tinned they did not like. They also inquired for

casks, bottles, glasses, plates, fine pocket and neck handkerchiefs, and leather of all sorts, particularly calf-skins and leather for the soles of shoes. We had a number of shoes and boots ready made, and round hats, with different articles of clothing, which were very acceptable to them.

The ladies of the presidency inquired for cotton and muslin, shawls of three ells and a half long and an ell broad, as well as for fine plain and worked muslins, printed cottons, and striped ribbands. In the hope of securing the friendship and good-will of our visitors, and to inspire them with an opinion of our disinterestedness, Don Louis Arguello was presented with an English fowling-piece, and each of the fathers with a piece of fine English cloth; to the latter was also presented a piece of gold stuff for the ornament of their church: these presents seemed to give very great satisfaction.

On the second of April, Don Louis Arguello came on board in his full-dressed military uniform, to pay his respects in the name of the Governor of Monterey to the Baron Von Resanoff, to offer him all possible assistance, and to request some official documents which would satisfy him that we were really what we gave ourselves out to be; also to ask what was become of the rest of the ships belonging to the expedition, with their commanders, and to inquire how long we proposed staying at St. Francisco.

The Chamberlain on this shewed several letters and recommendations which he had received from other powers at his setting out on the expedition, and excused himself that he had

none from the Spanish court, which, he said, had not arrived at St. Petersburgh before his departure. He had, notwithstanding, as he said he could assure the Governor, been received in the most hospitable and friendly manner in some other of the Spanish possessions, particularly at Teneriffe, by the Marquis de la Casa Cabigal. Don Louis expressed himself as perfectly satisfied with these assurances; and soon after remitted to the Chamberlain a very polite answer in writing from the Governor of Monterey, Don Arrelega, in which the latter promised to be at St. Francisco in a few days, to expedite, by his presence, the furnishing us with the supplies we desired.

The news of our arrival, and of the purpose for which we were come, spread in the meantime through the country: among other places it reached the mission of St. Joseph, an establishment to the south-east of St. Francisco, first founded about eight years before. Being exceedingly in want of many articles which we were reported to have for sale, one of the ecclesiastics of the institution, Father Pedro, was sent as a deputy to negociate with us. He made us friendly offers of the services of himself and his mission; and when he had been shewn by the Commissary of the Russio-American Company many articles of our merchandise, he entered into a treaty with him, by which it was agreed that in return for four pieces of English blue cloth, and seven pieces of linen, he was to send us a hundred and four measures of the best wheat; the bargain, however, to be subjected to the Governor's consent.

The deportment of this monk was very different from that of Father Joseph Uria. He was always gay and cheerful, and

was indeed a most agreeable companion; it appeared that this was by no means the first time of his being engaged in trade. As we expressed a wish of having a very considerable quantity of flour, with the proper sacks for stowing it on board the ship, he frankly told us that he had not the means of furnishing all that we required, either of the one or the other; yet he engaged to employ the Indians of his mission as much as possible, day and night, to grind corn for us, and hoped by this means to be able to deliver forty-two arrobas* of flour per week in proper sacks. If he could not furnish all the latter of cloth, the remainder should be made of horse, cow, or ox-hides.

On the seventh we were informed that the Governor from Monterey, Don Arrelega, with the Commandant of St. Francisco, Don Arguello, and some other officers, were expected that day at the presidency: towards evening their arrival was announced by a discharge of cannon from the fort. On this occasion we heard not only the guns of the fort with which we were already acquainted, but a discharge from behind another point of land within the harbour, which was at the entrance of a little creek to the south-east. We were not a little surprised at this, as we had never seen any fort there, nor had an idea that such a thing existed; it was in fact not visible from our anchoring-place, for it is so situated as to be quite concealed by the projecting point of land. An enemy's ship attempting to run into the harbour, deeming itself quite safe by steering out of reach of the fort at the entrance, might be very much surprised at being saluted with a discharge of artillery at the moment

* An arroba weighs about twenty-five pounds.

when such a salutation was least to be expected. On the contrary, a vessel keeping to the northern shore, and north-eastern part of this spacious bay, is secure from all danger*.

As soon as we were informed of the Governor's arrival, Lieutenant Davidoff was sent on shore to welcome the party, and make our warmest acknowledgments for the friendly manner in which we had been received. On the following morning, when we expected our visit to be returned, came an ecclesiastic with the Governor's apologies; that being advanced in age, and of an infirm constitution, he hoped he should be excused coming on board the ship, at the same time requesting the Chamberlain's company, with that of all the officers, to dine with him at the presidency. This invitation was accepted, and we were introduced to a very polite respectable man, who had come a distance of no less than twenty-five German miles on horseback, solely for the purpose of shewing respect to us, of furthering our views, and of making our stay as agreeable as possible.

The principal object of negociation between the Chamberlain Von Resanoff and the Governor, was the supplying the Russian settlements with provisions and other necessaries. The Chamberlain thought that an intercourse might be established between the Russian settlements and this Spanish province,

* Whoever is particularly interested upon this subject, and wishes to have a clear idea of the harbour of St. Francisco, must consult the chart, No. 33, of the Atlas to La Perouse's voyage. In the neighbourhood, and north of the island of los Angelos, and the Ponta de St. Antonio, an enemy's ship may be perfectly secure against all attacks from the Spaniards.

which would be a reciprocal benefit to them, and that it might be carried on by vessels passing from the one to the other at stated periods. The Governor, however, did not consider himself as endowed with sufficient powers to establish such an intercourse, although he perfectly concurred in considering it as a thing advantageous to both parties. He said that even the Viceroy of Mexico's powers were too much limited for him to enter into any arrangement, but he promised that the proposal should be submitted to the cabinet of Madrid.

Not the least difficulty was made about furnishing us with the supplies wanted for our present necessities. The Governor, on the contrary, dispatched messengers to all the surrounding missions, desiring them to send corn, flour, meat, salt, and other objects that we wanted; permitting us, as we had not the means of paying for them in money, to furnish an equivalent in the objects of merchandise that we had to dispose of. And that there might be no dissatisfaction with us, no envyings or jealousies with regard to the quantities furnished by each, he desired from us a regular catalogue of all that we wanted; and at the same time required catalogues from the several missions of their stores, and then ordered himself the portions which were to be furnished by each. With regard to the purchase of a complete ship's lading of corn and other provisions, which M. Von Resanoff urged very much, some difficulties were started, and it was not till after a long negociation, and a great deal of entreaty, that the Governor consented to our being furnished by the missions with the cargo we desired; but he said the Commandant of St. Francisco, Don Arguello, must receive the merchandise we were to give in exchange on account of the

Crown, and it must be kept as a deposit till leave could be obtained from the Governor-General of Mexico for it to be consigned to our real creditors.

By this arrangement our wants were satisfied, and the missions were pleased, as they flattered themselves that the Governor-General of Mexico would not refuse his sanction to the transaction. The Governor of Monterey, Don Arrelaga, hoped at the same time, that, by such a proceeding, he had sufficiently guarded against any danger of incurring the displeasure of his court.

During the time that the horses, oxen, and mules, of the several missions were employed in going backwards and forwards to bring us our cargo, the Governor, with his train, and the numerous family of the Commandant, did every thing in their power to make our stay agreeable to us. Almost every morning horses were upon the shore ready for us as soon as we chose to land, that we might take a ride about the neighbouring country; and we had free permission to go every where except to the forts.

We often amused ourselves with shooting the crested partridges and the rabbits which abound upon the sand hills near the shore. One day we went, accompanied by twelve people, and conducted by thirty or forty Indians, to catch hares and rabbits by a sort of snaring, when, in three hours, without firing a shot, we had taken seventy-five, and most of them alive. We sought in vain several times for lions, tigers, and bears; of the latter there had been formerly a great abundance, but they were

now become much more rare. On the northern shore of the bay the roe abounds, and the chase of it is very amusing and productive. In a number of aquatic excursions, I found most of the birds, with which I had become familiar at Sitcha, as pelicans, guillemots, ducks, particularly the *anas perspicillata*, and the *anas nigra*, sea-pies, and others. There were also seals of various sorts, and above all things, the valuable sea-otter was swimming in numbers about the bay, nearly unheeded. Some of us were almost every afternoon at the presidency, and the society was generally enlivened by dancing and music.

The seriousness of Father Joseph, who, as well as ourselves, was an almost daily visitor at the presidency, was admirably contrasted by the vivacity of Father Pedro; he also half lived with the family of Arguello. When the first spoke, all was silence and profound attention, but scarcely did the latter open his mouth without a laugh being immediately produced throughout the whole company: he was full of wit and humour, and entertained us all in the most agreeable manner.

The favourite dance here is called the barrego. It is performed by two couple, who stand opposite to each other. They hum a tune, and stamp the measure with their feet, making the figure of a half chain, then *balancer* opposite to each other to a slow time, and then recommence the dance. We took some pains to teach the ladies English country-dances, and they liked them so much, that we afterwards commonly danced them; they seemed particularly pleased that the whole party could be dancing at the same time. Some soldiers of the garrison, who could play on the violin and guitar, were our musicians.

Don Arguello had talked much to us, from the first of our arrival, of the combats between animals which form a part of the amusements of the place, and on the tenth of April he sent out eight soldiers on horseback, to endeavour to catch a bear alive, and bring it to the presidency to fight with a wild bull. The same evening they returned, having taken a large dark brown bear by means of ropes and slings. He lay upon an ox-hide, which was stretched over several branches of trees bound together, and had been drawn in this way for some miles by a pair of oxen. He was muzzled, and his claws were bound fast together: this confinement, with the manner in which he had been drawn, and the rage he felt, had heated him exceedingly. When the convoy arrived at the presidency, the poor creature's bands were very much loosened, and water was thrown over his body, which seemed to refresh him very much: at length he was tied by his hind legs only to a stake driven into the ground, close by a pool of water. Here he soon began to drink of his own accord, and to splash about in the water to cool himself. No one dared venture near him, for he growled, gnashed his teeth, and seemed very indignant at the treatment he received.

An order was now given to catch some wild bulls to fight with the bear, and the next day was fixed for the combat. We expected the time with impatience, and watched eagerly for the horses at the appointed hour; but when they arrived, we learnt, to our great sorrow, that our curiosity was entirely disappointed, for the poor bear had died in the night*. To make us some

* According to what we were told by the Spaniards, the bear in these combats generally comes off with the worst.

amends, the Commandant promised to give us a bull-fight, and this promise was performed the same afternoon. Several soldiers, both on foot and on horseback, killed one bull after another with their spears, but the animals did not fall till after receiving a great many wounds. As these bull-fights are well known to make a part of the national amusements among the Spaniards and Portuguese, and have therefore often been described, it would be needless here to repeat the description, especially as none of the combatants displayed any particular address and dexterity. I must, however, observe, that I could not help being struck at seeing, that the fathers, who in all their instructions to their converts, insist so strongly upon their cultivating tenderness of heart, and kind and compassionate feelings, never oppose these national amusements, though it cannot be denied that they are very cruel and barbarous. Perhaps, accustomed as they are from their infancy to the pastime, all idea of cruelty is lost, and they are no more affected by seeing this useless slaughter of animals, in a way revolting to those unaccustomed to it, than the Nukahiwans are by eating human flesh.

In the same light must be considered the cock-fights, which are frequently held among the Spaniards in New California, and which, it must be owned, are no less cruel and repugnant to humanity. Of these we saw no more than the little knives, which are fastened in the way of spurs to the legs of the animals, when they are to fight.

Our constant friendly intercourse with the family of Arguello, the music, the singing, the sports, and the dancing, awakened in the mind of the Chamberlain Von Resanoff some

new and very important speculations, which gave rise to his forming a plan of a very different nature from the first, for establishing a commercial intercourse between the Russian and Spanish settlements. The bright eyes of Donna Conception had made a deep impression upon his heart; and he conceived that a nuptial union with the daughter of the Commandant at St. Francisco would be a vast step gained towards promoting the political objects he had so much at heart. He had therefore nearly come to a resolution to sacrifice himself by this marriage to the welfare, as he hoped, of the two countries of Spain and Russia. The great difficulty in the way of such an union was the difference between the religion of the parties, but to a philosophic head like the Chamberlain's, this was by no means an insurmountable one. As the Governor, however, represented to him the political situation of things in Europe, and the suspicious nature of the Spanish government, and gave him little hopes of support in his commercial speculations, the Chamberlain assured him, that, immediately on his return to St. Petersburgh, he would go to Madrid as ambassador extraordinary from the Imperial Russian court, to obviate every kind of misunderstanding between the two powers. From thence he would proceed to Vera-Cruz, or some Spanish harbour in Mexico, and finally come on to St. Francisco to reclaim his bride, and settle all matters relative to the commerce he so much wished to promote. It will be seen from this detail, that the Chamberlain was no less spirited in forming his projects for the accomplishment of his wishes, than ardent and active in carrying them into execution.

The principal object which he had in view in this trade, was

the insuring to the Russian possessions in North-America and the islands, quite to Kamschatka and Ochotsk, a regular supply of corn and flour from New California. How practicable soever the undertaking must be allowed, there are, in my opinion, many obstacles in the way of its being accomplished, even supposing the idea to meet with a favourable reception at the Spanish court. The possessions of the Russio-American Company are already so widely extended, and so far removed one from another, that in the present state of their navigation it is very difficult to keep up any general communication among them; and the want of ships and sailors must be doubly felt, if a regular commercial intercourse with New California should be attempted. But, even supposing them to have ships and sailors, how could they pay for the articles they are to purchase but with money, or such objects of merchandize as the Spanish colony has occasion for, and how are these to be carried from the Aleutian Islands, from Sitcha, or Kamschatka? The wants of New California consist of manufactured goods, sugar, chocolate, wine, brandy, tobacco, iron and iron tools, &c. &c., and of these the Russian settlements are no less in want, perhaps even more, than the Spanish.

If, to obviate this objection, ships were to be sent regularly from Europe to New California, to purchase, either with money, or by barter, the provisions in corn, flour, and salted meat, wanted for the Russian possessions, and above all, to collect sea-otter skins, according to my view of the thing, this would be to procure them at a much greater expence than if the Russio-American Company were to draw the supplies directly from Cronstadt. Besides, that corn is much dearer in New

California than at Cronstadt, the ships must run extremely out of their way, and suffer a great loss of time in going there.

As to collecting sea-otter skins, in which, without doubt, a very advantageous trade might be established, it is a great question whether the Spaniards would ever be brought to consent to such a trade. I do not believe they would. It is expressly forbidden by the Spanish Government, for ships of any nation, under pain of the vessels themselves being forfeited, to catch sea-otters within thirty leagues of their coast, and the Governor one day complained very much to us of the sailors of the American States, that they not only supplied the inhabitants of the north-west coast of America with guns, and powder and shot, but even carried their audacity so far, as to bring a great number of Aleutians with them to catch sea-otters on the coast of California. He related, as if it had been a matter unknown to us, that a certain Captain Orcan had, some years before, come with thirty men and four women from Oonalashka, secretly to catch these animals within the limits of his government. Since that time an order had been sent from the Spanish government for two ships from Acapulco to cruize constantly about the coast, for the purpose of preventing such illicit proceedings. Indeed, during our stay, information was brought that an American ship, having been detected in the fact, was stopped and carried into St. Diego.

If Russia would engage in an advantageous commerce with these parts, and procure from them provisions for the supply of her northern settlements, the only means of doing it is by planting a colony of her own. In a country which is blessed

with so mild a climate as California, where there is such plenty of wood and water, with so many other means for the support of life, and several excellent harbours, persons of enterprising spirits might, in a few years, establish a very flourishing colony. With the assistance of the able mechanics who are to be found at Sitcha, wind and water mills might soon be constructed, looms established, and manufactories for burning brandy. Large and small vessels, and granaries for corn, would then be built; vast herds of cattle would be raised, and sea-otters in abundance taken; thus, in time, Kamschatka and Eastern Asia would be amply supplied from hence with all kinds of vegetable and animal productions for the support of life. The Russio-American Company have already sufficient sources of wealth in their present possessions from the extensive fur-trade they yield, nor has any occasion to aim at increasing it by foreign dealings. Their settlements only want a better administration to rise with fresh vigour from their ruins; but to effect this, their strength must be concentrated, and they must abandon the mistaken policy of extending them to such a degree as to weaken every part.

CHAPTER IX.

Want of Boats, and Water Communication at St. Francisco.—Excursion by Water to St. Joseph.—Mission of St. Joseph.—Description of the same.—Dance of the Indians at this Mission.—Pueblo di St. Joseph.—Dangers encountered in our Return to St. Francisco.

ALTHOUGH the three missions of St. Francisco, Santa Clara, and St. Joseph, all lie near the south-eastern part of the Bay of St. Francisco, and a communication by water, from one to the other, would be of the utmost utility, it seems almost incredible, that, in not one of them, no, not even in the Presidency of St. Francisco, is there a vessel or boat of any kind. Perhaps the missionaries are afraid lest if there were boats, the escape of the Indians, who never wholly lose their love of freedom, and attachment to their ancient habits, might be facilitated, and therefore consider it better to confine their communication with each other to the means afforded by the land. The Spaniards, as well as their nurselings, the Indians, are very seldom under the necessity of trusting themselves to the waves, and if such a necessity does occur, they make a sort of boat for the occasion of straw, reeds, and rushes, bound together so close as to be water-tight: in this they contrive to go very well from one shore to the other: these sort of boats are called by the Spaniards walza. The oars consist of a thin long pole somewhat broader at each end,

with which they row sometimes on one side, sometimes on the other.

This total want of vessels, which are, as it were, the keys to all southern and eastern possessions, is a strong proof of the great negligence of the government. It was because they had not a boat themselves, that, on the day of our arrival, they were obliged to remain so long upon the shore, and were precluded all communication with us till we sent our boat to them. As the Mission of St. Joseph lies on the opposite shore of the bay, at a distance of sixteen leagues, a communication by water would be of infinite advantage. But, notwithstanding that this convenience is so perfectly within their reach, they have no other intercourse but by land, when they are obliged to go round the bay, at least three times the distance.

The difficulty of the land transport, the small number of converts at St. Joseph, and a disease hitherto unknown in New California, the measles, which had broke out this year, and had for some weeks attacked great numbers of the Indians, occasioned very great delays in furnishing us with the supplies we had agreed for. The Chamberlain, Von Resanoff, therefore applied to the Governor for permission to send our boats to St. Joseph that the transport of the corn and other articles might be expedited; and the advantage of the thing, in sparing the labour of the men and horses, was so obvious, that he readily consented to it.

Accordingly, on the twelfth of April, three boats were hoisted

out, and an estafette was sent by land to St. Joseph to inform the mission of our intention, with an order from the Governor to make a fire upon the landing-place in order to point it out to us; for both the Governor and the Commandant assured us, that, without such a direction, we should never be able to find it. Lieutenant Davidoff was appointed to the command of this expedition, and he permitted me to accompany him.

On the fourteenth, towards noon, we quitted the ship, availing ourselves of the tide to stretch over this arm of the sea to the south-east. When we had reached the point of land lying north-eastward of the presidency, we saw the battery of five cannon which defended the south-south-eastern and south-western division of the bay. The shore, on our left, or the eastern shore, presented a low and extensive plain stretching several miles inland, which was bounded by a chain of hills of a moderate heighth, intersected with deep vallies, and in some places well covered with wood. The western shore is bounded with hills partly naked, partly covered with brushwood. The whole shore forms many points of land and small bays: in one of the latter lies the Mission of St. Francisco. As far as this place, the water is deep enough for large vessels, but soon after it grows much shallower, not having a depth of more than five feet; this was shewn by a great change in the colour of the water. After proceeding for several sea-miles, sounding all the way very frequently, we saw in the southern horizon, high land, which appeared to rise like an island in the midst of the water; and soon after discerned, pretty clearly, to the south-east, upon a considerable eminence, the Mission of St. Joseph. At the same time we observed, at a great distance, upon the supposed island,

a considerable smoke, but as it was so much to the south, we concluded it could not be the signal appointed for us, but rather considered it as a fire made there by chance, and kept watching for our signal upon the nearer eastern coast.

The day was nearly closed in before we were made sensible of our mistake, and discovered that what we had supposed to be an island was united by a narrow neck of land to a plain lying farther to the east. But having a fresh wind from the south-west, we had got so near the eastern shore, that it was now impossible either with oars or with a sail to reach the signal-fire. The night, when it came on, was so dark, that we were obliged to cast anchor in a shallow place in three foot water: our boat was now wholly separated from the others; we had even lost sight of them entirely. On the morning of the fifteenth, we endeavoured in vain to reach the high land, and as the wind still blew fresh from the south-west, nothing remained but to return back to our ship. The long-boat, after struggling all day and all night with the winds and waves, thought herself fortunate on the morning of the sixteenth also to reach the ship in safety. The third boat, after losing its mast, had taken refuge in a small creek. The same squally weather with rain continued till the nineteenth, when it cleared, and the wind changed to the north and north-west.

As my wish to visit the mission of St. Joseph was not abated in consequence of this unsuccessful attempt, I asked and obtained permission of the Governor to repeat the excursion under another form; on the twentieth, therefore, I set off in a three-seated baidarka, accompanied by a sailor and a huntsman.

Early in the morning we left St. Francisco, and towards noon reached the level before St. Joseph, and began to seek for the principal channel, which is in the neighbourhood of several hills: these heights are indeed the principal guides by which to find it. They stretch from the north-west to the south-east, and are surrounded by a muddy shallow, which extends for a considerable way along the shore. To avoid this, a boat must steer in a westerly direction, till the southern hill, which in our former expedition we had mistaken for an island, lies to the east. The channel which should then be followed winds among heights: the two lowest should be left to the north, and the others, which are much higher, to the south. This channel runs at first in a north-westerly direction, and then, after many windings, south-easterly, into the land: at the flood, the depth of water is from six to nine feet, but at the time of the ebb it is scarcely navigable even for very small boats. At low water it is almost impossible to land, on account of the muddy nature of the shore, and at high water the landing is not unattended with difficulty. The many little channels with which this flat is intersected make it an absolute labyrinth, and as we were unacquainted with the way, we often mistook, and had to turn back, having quitted the principal channel.

Wearied at length with perpetually going astray, I contrived to get on shore, and ascended a neighbouring hill, where I could have a better view of the district, and was thus enabled to discern to the east a place where we could land commodiously, though at the distance of three leagues and a half from the mission. The country over which we were now to wander rises by degrees above the low plain, and is bounded by a chain of

hills which stretch from the north-north-west to the south-south-east. Numerous herds of horses and cattle were running wild here, without any attention being paid to them; the horned cattle even render the country not very safe for foot-passengers. Besides these herds, we met a great number of foxes, and a large wolf, which ran away frightened: the foxes appeared to live upon the most friendly terms with the young calves, and followed the cows about as if they had been equally their children.

A little before sun-set we arrived at the mission, exceedingly fatigued. It was now under the superintendence of two ecclesiastics, Father Louis and Father Pedro; the latter only was at home; he received us with open arms, and immediately sent a man and horse to the shore to fetch our baggage, and the sailor, whom we had left to take care of the baidarka; this was now consigned to the care of some Indians. Father Louis was absent for a short time at St. Francisco. On the morning of the twenty-first, the Indian converts of the mission were all assembled together to receive from Father Pedro their allotted tasks of work for the day. This father, when I saw him at St. Francisco, had promised to entertain me with a dance of the Indians, if I would come and visit him, and he therefore now announced that they were to have a holiday from their work, that they might dress themselves in their very best attire, and prepare for a dance. For this purpose he distributed a number of ornaments among the best dancers, who immediately withdrew with them to make the necessary preparations.

Father Pedro in the meantime shewed me about the buildings and grounds belonging to the mission. Although it is only

eight years since they were begun, they are already of very considerable extent: the quantity of corn in the granaries far exceeded my expectations. They contained at that time more than two thousand measures of wheat, and a proportionate quantity of maize, barley, pease, beans, and other grain. The kitchen-garden is extremely well laid out, and kept in very good order; the soil is every where rich and fertile, and yields ample returns. The fruit-trees are still very young, but their produce is as good as could be expected. A small rivulet runs through the garden, which preserves a constant moisture. Some vineyards have been planted within a few years, which yield excellent wine, sweet, and resembling Malaga.

The situation of the establishment is admirably chosen, and according to the universal opinion, this mission will in a few years be the richest and best in New California. The only disadvantage is, that there are no large trees very near. The natives of the country have several times from thoughtlessness, when they wanted to celebrate some particular rejoicing, set fire to the woods, and burnt down large tracts, so as to leave scarcely any trees standing; the wood for building must therefore be brought from a distance of several miles. To compensate this disadvantage, there are in the neighbourhood of the mission chalk-hills, and excellent brick-earth, so that most of their buildings are of brick. Their stores of corn are much greater than of cattle, consequently the number of oxen slaughtered every week is considerably smaller than at St. Francisco, but the consumption of corn and pulse is much greater. The organization of the institution is entirely the same as at St. Francisco. The habitations for the Indians, *las Rancherias*, are not

yet finished, so that at present they live chiefly in straw huts of a conical form.

Father Pedro, who shewed me about every where, proposed, when we had visited all that he thought worthy of observation, to go and see the Indians preparing for their dance. I accepted his proposal with delight, and he led me to a small stream, by the side of which the dancers were assembled, extremely busy in smearing their bodies over with charcoal-dust, red clay, and chalk. One was ornamenting his breast, another his belly, another his thighs, and another his back, with regular figures of various kinds. Some were ornamenting their otherwise naked bodies all over with down feathers, which gave them rather the appearance of belonging to the monkey species than of being men. Their heads, ears, and necks, were set off with a great variety of ornaments, but the bodies, except a covering about the waist, were naked. The women were at the same time performing the offices of the toilet in their houses; they were all, consistently with the laws of decorum, dressed; their faces and necks only were painted, and they wore also a profusion of ornaments of shells, feathers, and beads.

The Indians of this mission are very different from those of St. Francisco, as to size and structure. The men are almost all rather above the middling stature, and well built; very few indeed are what may be called undersized. Their complexions are dark but not negro-like, and if their physiognomy cannot absolutely be called pleasing, there is nothing disagreeable in it; indeed, I thought that they very much resembled some of the more northern tribes: some seemed to possess great mus-

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Engraved by Letitia & Eliz.h Byrne.

Dancing at the Indians at the Mission of St Joseph in New California.

cular strength: they have very coarse black hair. The women seem in general much taller in proportion than the men; I saw several more than five feet and a half in heighth. If there were none either among the men or women that I could call positively handsome, I did not observe in any the dull, heavy, stupid look of their brethren at St. Francisco. The people of this mission are indeed generally considered as the handsomest in New California, and several of the Spanish soldiers, for want of European wives, have united themselves with Indian beauties.

The dancers assembled towards noon in the large court of the mission; they were divided into companies; some were distinguished above the rest by particular ornaments and by a particular kind of song which they sung. One of these divisions consisted of the inhabitants of the coast, the other were people from the more inland tribes; the former were not so well made, so strong, or so good-looking as the latter. These people formerly lived in great enmity with each other, but are now united here by religion; not however so entirely but that sparks of their ancient enmity still remain alive, and cannot be extinguished. For instance, the fathers never can prevail upon them to intermarry with each other; they will unite themselves only with those of their own tribe, and do not mingle in the society of the other tribes but with a certain kind of reserve.

In their dances they remain almost always in the same place, endeavouring partly with their bows and arrows, partly with the feathers they hold in their hands and wear upon their heads,

partly by measured springs, by different movements of their bodies, and by the variations of their countenances, to represent battles, or scenes of domestic life. Their music consists of singing, and clapping with a stick, which is split at one end. The women have their own particular song, and their particular manner of dancing. They hop about near the men, but never in concert with them: their principal movement or action is striking with the thumb and forefinger upon the belly, first on one side, then on the other, in a regular measure. As soon as the men begin to dance, the women begin also, and cease the moment that the men cease.

About two o'clock we sat down to a very good dinner, and afterwards went again to see the Indians, who were still occupied with their dancing, and were now going to exhibit a mock-fight. A large straw figure represented the enemy, and a number of the men, armed with bows and arrows, sprung and danced about with frightful gestures and contortions to defy their adversary, who, if he had been able, would have done the like. One of them at length gave a signal, and at the same moment the straw figure was pierced with a vast number of arrows, and the man who personated the chief was carried off in triumph.

On this occasion I observed that most of them were very expert marksmen, yet it appeared to me that if the enemy was courageous, and would attend more to the use of his weapons, and less to his gestures, he could scarcely fail of obtaining the victory. These people were never in the habit of eating their slaughtered enemies: the great endeavour of the contending

parties in all their conflicts is to steal away the young girls or the wives of the enemy.

Another party of the Indians were dancing round a large fire, from which several of them from time to time, apparently for their pleasure, took a piece of glowing ember as big as a walnut, which, without farther ceremony, they put into their mouths and swallowed. This was no deception; I observed them very closely, and saw it performed repeatedly, though it is utterly incomprehensible to me how it could be done without burning their mouths and stomachs: instead of being a matter of pleasure, I should have conceived that they must be putting themselves to exquisite torture.

I was also entertained with the representation of a hunting-party. The Indians fasten the horns of a deer upon their heads, and throw a part of the skin over their shoulders: in this way they lurk among the high grass, where the stags and the roes come to feed, imitating their motions so well, that these creatures, though naturally shy and timid, are deceived, and come so near them, that they can easily hit them with their bows and arrows. They often kill several without the rest having any idea of their danger.

Directly to the east, about seven leagues from St. Joseph, is an arm of a great river which first winds towards the north, and then taking a westerly direction, empties itself at last into the north-eastern part of the bay of St. Francisco. In the neighbourhood of this river lie several villages of Indians, who do not yet live with the Spaniards or the baptized Indians.

At the first foundation of the mission they were often very troublesome, and annoyed it much; nay, only a year and a half before I was there, they had murdered five soldiers, and wounded one of the priests and another soldier dangerously. After this occurrence a strong military expedition was sent against them, who made a great carnage among the Indians, and compelled them to conclude a peace; since this there have been no farther disturbances. The Spaniards and Indian converts often go among these Indians, remaining with them perhaps for a fortnight together, for the purpose, if possible, of making new converts; some of them will also not unfrequently make visits to the mission, when they always return home enriched with presents of various kinds.

Three leagues from St. Joseph to the south-west, and also on an arm of the sea, lies the Pueblo of St. Joseph. By the word Pueblo is here understood a sort of village consisting of invalid soldiers, who are released from the service, and become peasants; they cultivate the land, and live in affluence from the produce of their husbandry and from breeding cattle. There are several of these Pueblos in different parts of New as well as of Old California, and the population of them increases every year. The Governor of Monterey assured me that from one hundred this had in twenty years increased to seven hundred. It is extraordinary that, on the contrary, the number of Indians in the mission constantly decreases.

On the twenty-third, I took leave of Father Pedro, to whom I owe my public acknowledgments for the friendship and hospitality I experienced from him. He had horses saddled for

us, and we went accompanied by a soldier in search of our baidarka, which we found in the very spot where we had left it. Some wild bulls followed us in our way, and occasioned us a good deal of uneasiness; a number of foxes, on the contrary, which we pursued, ran terrified away.

We rowed in very shallow water along the channel that winds among the hills, down to the bay; the muddy shores which stretched on both sides of us being covered with sand-pipers, snipes, wild-ducks, and sea-mews; we did not, however, attempt to shoot any of them, as we could never have got them out of the deep mire. We saw also a good many sea-otters, one of which we shot, but it took refuge in one of the smaller channels, and we were not disposed to lose our time in pursuing it.

We had scarcely reached the open bay, when a strong north wind rose, which rendered it impossible for us to go forwards. Wetted through and through by the dashing waves, held back by the force of the current, and tormented with hunger and thirst, we were obliged at sun-set to relinquish all attempts at getting on, and resign ourselves to the idea of passing the night out in the open air, in a low boggy place, near the landing. As we had not expected to be in such a situation, we had furnished ourselves only with provisions for one day, and had nothing left now but a little bread and cheese, and a very small quantity of brandy, which we thought it prudent to husband for the remainder of our voyage; we laid ourselves down with empty stomachs, and though surrounded with water, could not quench our thirst, since there was none

to be found but what communicated with the sea, and consequently imbibed its qualities. We endeavoured to shelter ourselves somewhat from the force of the wind by means of our wet sail-cloth; and in this situation, half-starved with cold, waited the return of day with the utmost impatience.

Our clothes had got tolerably dry by the morning, and at ten o'clock we were ready to depart, but found, that from the tide not being sufficiently returned, there was still a larger extent of muddy shore than it was possible to cross; nor would it admit of our embarking again till about noon. We had scarcely seated ourselves in the boat, before the same strong north and north-west wind returned, and left no probability of our being able, even on that day, to reach St. Francisco. We, however, resolved to row to the shore opposite to us, which appeared to be much higher and well wooded. About three o'clock in the afternoon we arrived there, but found a low boggy plain, overgrown with nothing but the salt weed, *saisola*, and intersected like the plain on the other side with a number of little channels, so that we seemed to have but a very indifferent prospect of being able to reach the woods.

We, however, followed, in our boat, the widest channel, and after rowing about three quarters of an hour, amid many windings, were fortunate enough to find a place where we could land, and whence there was reason to hope we might soon reach the wood; that attained, we made ourselves sure of meeting with fresh water. Armed with guns and pistols, and carrying with us our last morsel of bread and cheese, and our empty bottle, we proceeded on our way, but to our infinite mortifi-

cation wandered about in vain in search of some brook or spring where we might quench our thirst. Before night closed in we had reached the wood, but after having gone at least a German mile, not a drop of water had we met with. At length we came to a numerous herd of bulls and cows feeding wild in a meadow where there was abundance of high grass; but after examining the place thoroughly, keeping off the cattle with our guns and pistols, still we sought in vain, not a drop of water could we find. Exhausted with fatigue and mortification, tormented with hunger and thirst, we laid ourselves down, in a state of something like listless despair, when our ears were on a sudden struck with the croaking of a frog. Never did the tuneful notes of the nightingale sound half so grateful to the ears of the poet or the lover as did the voice of this animal now sound to us. We started up, and following the noise, found ourselves at length, in the darkness of the night, by the side of a little stream of excellent water. As we had for two days been at very short allowance of food, and had not been able to quench our thirst at all, we fell upon the water with such greediness, that in two hours we drank up fourteen bottles full;—it is to be observed that we were a party of only three.

The night was cool and damp, we therefore made a fire to warm ourselves, and rested here till midnight, when the moon being very bright, we determined to return to our baidarka. By the way we met several bears and wild-bulls, but we frightened them away with our guns, and about three o'clock in the morning reached our boat. It was then a perfect calm, and in a very fine morning we commenced our return to St. Francisco.

The channel which we followed to get into the bay was full of sea-otters and sea-dogs; many lay on the muddy shores, and others were swimming with their heads just above the water. The two last days were so fresh in our memories, and our stomachs were so craving for food, that we renounced all the joys and advantages which might have been derived from the chase of these animals, and certainly a rich booty might easily have been obtained, rather than lose a moment's time in the pursuit of them. Three sea-otters, however, who lay sleeping almost close to our boat, presented a temptation not to be resisted, and these we did kill and carry away with us.

Towards noon we were got pretty near the Mission of St. Francisco, but a north-west wind, which rose at the same moment, again retarded us so much, that we did not reach our ship till about three, exhausted with hunger, fatigue, and mortification. To my inexpressible concern, a number of objects of natural history which I had collected in my excursion, chiefly birds and plants, became a prey to the stormy sea, and I brought nothing home with me except the three sea-otters.

CHAPTER X.

Geographical Description of the Harbour and River of St. Francisco.—Military Expedition into the Interior of the Country.—Sierra Nevada.—Land Communication.—St. Blaise.—Acapulco.—Medical Observations.—The Cow-pox.—The Measles.—Midwifery.—Other Diseases.—The Latido.—Natural History.

The difficulty of obtaining any geographical information from the Spaniards has prevented our having hitherto an accurate knowledge of this country. It therefore appears to me, that what little information I was able to procure, and such few observations as I was enabled to make during my stay at St. Francisco, may not be wholly devoid of interest.

However imperfect, and however little satisfactory may be the chart which the unfortunate La Perouse obtained of the Harbour of St. Francisco, copied from a Spanish original, it may serve, at least, to give a tolerable idea of this archipelago.

Of the great arm of the sea which stretches to the east and south-east, almost as far as Santa Clara, I have spoken in the last chapter in relating my excursion to St. Joseph. To the north and north-east, another broad bay extends for several miles, over which are scattered a number of islands, some larger, some smaller. Into this, flow four, or, as some say, five

large rivers, which come from the east. They are very probably only several mouths belonging to one large river, which comes from the south and south-east, and dividing at some distance from the northern arm of the bay, seeks different vents into it. The Spaniards have many times followed the southern or left bank of this river on horseback, for several miles inland, but for want of boats they were never able to examine the right bank. At between eighty and ninety leagues inland, the stream has from four to five fathom water, and its breadth is then so great, that a ball fired from a musket would scarcely reach the opposite shore.

Every year military expeditions are sent out to obtain a more exact knowledge of the interior of the country, with a view, if possible, of establishing, by degrees, a land communication between Santa Fé and the north-west coast of America. While I was at the Mission of St. Joseph, thirteen soldiers, with a serjeant and corporal, arrived there in their return from one of these expeditions. These people asserted that they had penetrated between eighty and ninety leagues into the country, and had arrived in the neighbourhood of a high and widely extended chain of hills, covered with eternal snow; this chain is known to the Spaniards under the name of the Sierra Nevada, or Snowy Mountains. The river, or rivers of St. Francisco, and another stream which flows into the sea near St. Michael, must have their sources in these mountains.

Individuals, inhabitants of the Sierra Nevada, affirm, that three or four days journey eastward of this chain, they have seen men with blue and red clothing, who entirely resembled the

Spaniards of California: they were very probably soldiers of Santa Fé, who had been sent on a similar expedition from the eastern coast, to examine the interior of the country westwards. According to this information, the Spaniards, between the thirty-fifth and thirty-eighth degrees of latitude on the different sides of the continent, must have come pretty near to each other; a probability is thus afforded, that, in time, a regular inland communication may be established between Santa Fé and St. Francisco.

According to the account of these travellers, there are very considerable forests and rivers in the interior, and the country is very fertile and populous. The Indians, who live near the coast, are in general irritable and quarrelsome in their dispositions, while the numerous tribes in the interior are quiet, peaceable, and timid. Those who live upon the banks of the large rivers are very good swimmers, and when they see the Spaniards, commonly betake themselves to flight by swimming over to the other side: while the objects of their terror, on account of the depth of the water, from having no boats, and not being as good swimmers as themselves, cannot pursue them.

The Indians have no other weapons but bows, arrows, and stones; the Spanish soldiers, on the contrary, are armed with a musket, a pair of pistols, and a lance, and being excellent horsemen, are much more than a match for the poor Indians, notwithstanding that the latter outnumber them incalculably. If the Spaniards have reason, at any time, to apprehend an attack, they throw a mantle of thick deer-skin over their shoulders, which no arrow can pierce, and have besides a thick leathern

shield, by means of which they ward off the arrows with great dexterity. When they are under the necessity of revenging an attack, the lances make a great carnage; they ride in among them with their spirited horses, and the lances in their hands, and strike them in numbers to the earth.

During our stay at St. Francisco, one of these expeditions was fitted out to travel to the Sierra Nevada. The party, which was to commence its journey a few days after we quitted the bay, consisted of five-and-twenty. At the head of it were Don Louis Arguello, and his brother the Cadet San Iago Arguello, Afferez the ensign, a corporal, and our friend, Father Joseph Uria. The latter went partly in the hope of engaging fresh converts, partly for the purpose of gaining a more extensive knowledge of the interior, with a view to establish a new mission, from which he expected great advantages to be derived. In this manner the Spaniards are constantly endeavouring to extend further and further their circle of action, trusting that, without any extraordinary effort, they shall be enabled, by degrees, to unite in the most advantageous manner their possessions on the eastern and western sides of the continent. The establishment of new missions depends upon the father-superior, whose station is at Monterey.

It would give the Spaniards less trouble, and would be much less expensive to the government, if they were to institute expeditions by water, and to explore the great river which runs into the bay of St. Francisco; if they were to ascertain its course, whence it has its source, how far it is navigable, and for what sized vessels. The ships that come hither annually,

might, with the sacrifice of a few weeks, execute such an undertaking, and the government would, by this means, gain a more accurate and extensive geographical knowledge of its states in one year than it ever can do by the military land expeditions: these, it is farther to be observed, are undertaken without any astronomical assistances whatever.

From the want of small vessels and boats in the harbour of St. Francisco, the Spaniards are, as it were, separated entirely from the opposite shore of the bay, though it is not more than an Italian mile distant; this precludes their having any intercourse with the more northerly tribes of Indians in the neighbourhood of Port Bodega. In consequence of such an entire failure of communication by water, that by land far exceeds what any one could expect. Posts go regularly from Vera-Cruz to all the provinces of North and South America. A courier comes in about two months from Mexico to St. Francisco, the furthest establishment to the north: it commonly brings the news from Europe of about six months back. From St. Francisco any one may travel with the greatest safety even to Chili: there are stations all the way kept by soldiers.

The most unhealthy part of the peninsula of California is about St. Blaise; at the same time the harbour there is excellent. Many people die every year of a very bad sort of putrid fever, accompanied with violent eruptions. The Spanish government is therefore obliged, in order to induce people to come to the place, to tempt them with higher pay than they would receive any where else. A sailor has more than thirty piastres, or Spanish dollars, per month; a pilot from eighty to

ninety, a lieutenant from two to three hundred. The Commandant, whose pay elsewhere is from four to five hundred piasters per month, is here allowed from five to six thousand. In August most of the inhabitants leave the town, since their stay, during the abundant and very heavy showers which fall at that period of the year, would be very pernicious. In consequence of these circumstances, the government have often had it in contemplation to abandon the settlement entirely, and transfer the extensive trade carried on there to some more wholesome port. The commercial people of Mexico and Guadalaxara have always opposed this change strenuously, because the situation of St. Blaise is exceedingly convenient to them.

Acapulco, an excellent harbour on the western coast of Mexico, was formerly a very unhealthy spot, and cost the lives of a great many people. A Spanish surgeon ascribed this unwholesomeness to a large standing lake near the town, and recommended to the government having it dried up. This was accordingly done, and the place has not only ever since been perfectly healthy, but has been freed from the immense swarms of musquitoes with which it was before molested.

Sufficient attention is not paid to taking care of the health either of the Colonists or the Indians in New California: the military alone have a physician and a surgeon, who live at Monterey: neither the missionaries, nor their adopted children, the Indians, have any medical assistance. The climate is better and more healthy than in the peninsula of Old California; yet the Indians of the mission are often attacked with feverish

complaints, and are of such weak constitutions, that numbers die of them. It is very possible, that in their former mode of life they were rarely ill, but the great change of their habits, the different kind of nourishment they now take, their being constrained to labour much more constantly than before, with other circumstances, may have operated powerfully upon their constitutions. The ecclesiastics complain that upon the least illness the Indians become wholly cast down and dejected, and giving themselves up to this depression of spirits, will not observe the diet or any thing else recommended for their recovery. The missionaries are entirely unprovided with medicines, except some trifling emetics and cathartics, which they keep solely for their own use.

The Governor of Monterey, Don Arrelaga, gave me the important information that vaccination had been introduced into Mexico from Europe, and that a surgeon there had vaccinated a great many people. He assured me that for some time the cow-pox had been observed very much among the cattle in the provinces to the south of Monterey, and that people had begun to inoculate from it with very great success. But since, for more than twenty years, the small-pox had not been seen here, and people had consequently forgotten the dreadful devastations it had made, the precaution of vaccination was considered as superfluous, and many people rejected it on that account*. It is to be remarked, that this disease among the

* Quere? Is it not possible that the prevalence of the cow-pox, mentioned here as existing among the cattle, may have been a means of keeping the country free from infection of the small-pox. The circumstance at least is striking, and surely warrants such a speculation.

cattle in California seems to shew itself principally in the spring, and abates when the grass is dried by the warm weather in the months of June and July. I took some pains to have seen the disease upon the animal itself, but in vain; no subject was afforded me among the cattle within my reach.

The measles had now been very prevalent here for some months, and had been very fatal among the Indians. Some thousands of the natives in California died of it, but the Spaniards who took the infection always recovered without feeling any farther ill consequences. It seems as if the pores of the skin in the Indians are very close, so that the eruption does not easily throw itself out, and this occasions a great deal of fever of a slow and putrid character. Almost all the Indian women who caught the measles while they were pregnant miscarried.

Child-birth seems remarkably easy in California among the Spanish women. Madame Arguello informed me that since she had been in the country, which was a considerable time, she having herself had fifteen children there, she did not recollect having heard an instance of a Spanish woman dying in child-birth. There are no midwives; some female friend assists at the delivery. Many of the Indian women, on the contrary, die at this time, owing, as it should appear, to a very pernicious custom they have of putting some great weight upon the belly during the labour, under the idea of facilitating the delivery. Miscarriages from the third to the seventh month are by no means unfrequent among them.

The most frightful of all the diseases here is that which is

but too well known in every part of the world, and which some traditions assert to have been first introduced into Europe from this quarter of the globe. It is almost universal both among the Spaniards and Indians, and occasions so much the greater devastations among them, as they themselves resolutely reject all medical assistance for it. Spots upon the skin, hard swellings, pains in the bones, sores in the neck, with many other horrible and disgusting deformities, consumption and death, are the usual consequences of it. Ophthalmia, rheumatic pains, swellings at the corners of the mouth, and chronical diseases of many sorts which I observed, may also I believe be pretty generally referred to the same origin.

Father Louis at St. Joseph complained to me of another disease which prevails in North and South America equally among the Spaniards and the Indians; as, however, it never fell under my own observation, I cannot give a very clear idea of it. It is a palpitation at the heart, and called by the Spaniards the *latido*. It comes on first with a pulsation in the lower belly, which constantly increases: adults alone are subject to it; among children it has never been known. The principal symptoms attendant on this pulsation are pains in the belly and the neck, which occasion a feeling as if a string were drawn tight over them. A disinclination to eat comes on, and at length a total loss of appetite; sometimes attended with great sickness, and a hardness in the belly, as if there was a large knot; cramps are also frequent, and even in men every appearance of hysterical affections. In this situation the sufferer drags on a miserable existence, constantly wasting away, and at length dies, though the death does not seem very much

accelerated by the disease, since old people are often to be seen who have been for many years afflicted with the *latido*. Tenia, aneurisms, or other known causes to which physicians have attributed this disease, do not appear in any way to account for it satisfactorily.

My researches in Natural History met with more obstacles in California than in any other part of our expedition. To detail all the petty circumstances which crossed me in this way would appear prolix, and running too much into minutiæ. I shall only therefore mention some of the principal. Our regular habitation during our whole stay was on board the ship, and there we were all constantly employed in loading and unloading goods. Several skins of sea-dogs and birds that I had laid upon the deck to dry, were, I know not by what means, thrown overboard. The paper for drying plants disappeared one day when I was on shore, and I was informed was by mistake put under a quantity of goods which had in my absence been taken on board, so that it could not be got out without entirely unloading again, and this was impossible. Several live birds which I had purchased were, as soon as my back was turned, suffered to fly away. Sometimes, when I asked for a sailor to go upon a water excursion with me, I was told that these people had more important business to attend to, and that our expedition was not undertaken for the promotion of Natural History. One evening I brought home a number of ducks and other aquatic birds, intending to strip off the skins, and dry them, but the next morning I found them all with their heads cut off. By these, and numberless other occurrences of a similar kind, I was at length so entirely discouraged,

that I relinquished all idea of attempting farther labours in the science, and resigned myself to the wishes of the Chamberlain Von Resanoff, that I should undertake the office of interpreter, and transact all our business with the missionaries relative to the purchase of corn and other articles.

Whales are very often cast on shore in these parts, particularly in the bay of Monterey. Sea-dogs and sea-otters are taken in nets, though in very small numbers. The American lion, *Felis concolor*, the American tiger, *Felis onca*, stags, roes, wolves, foxes, bears, and pole-cats, *viverra putorius*, are very common here; the latter is called by the Spaniards *sorrillo*. The urine which this animal spurts from him to defend himself against his enemies exceeds in smell every thing that can be conceived; the missionaries told me that in the night it is exceedingly phosphoric, and if put into a glass retains the phosphoric appearance for a very long time.

Among the feathered species, I observed the *vultus aura*. The feet of this bird are very different from those of any other; the claws are thin and small, and the three foremost are united with a sort of half-web, so that to judge by the feet, it seems to belong to the class of marsh-birds, but according to the bill, it should belong to birds of prey. I was told that a soup made of the flesh of this bird is extremely wholesome, and that by taking it freely, all diseases of the body have a tendency to throw themselves out upon the skin. Perhaps the flesh itself has rather a propensity to creating eruptions of the skin, as it is well known that in some persons strawberries will have that effect, though others eat them in abundance without any effect

whatever. These vultures are gregarious; they are slow in flight, and feed upon carrion, which, in company with the ravens, with whom they live upon very friendly terms, they devour in great quantities.

The *oriolus phœniceus* flies about the houses here like sparrows in Europe. The *oriolus icterus*, *alanda calandra*, *picus auratus*, *tetrix cristatus*, *trochilus mosquitus*, and others of this species, are also very abundant. Of the colibris there are a great number in summer, but not one is to be seen in winter. It is universally said here that they remain in a torpid state all the winter, whence they have the name of *saxaro resuscitado*, resurrection birds. Of water and marsh-birds there are a great variety, particularly of the *ardea*, *tringa*, *scolopax*, *pelecanus*, *larus*, *colymbus*, *mergas*, and *anas* species. In winter, the number of wild geese in the boggy plain to the south-east of the bay is so great, that they are a positive nuisance; they do great injury to the young corn which stands the winter, and are so impudent, that they are scarcely to be frightened away by firing among them. *Raya aquila*, and a species of *acipenser*, were the only fish that fell under my observation.

CHAPTER XI.

Departure from St. Francisco.—Situation of the Promüschleniks.—Voyage by Sea.—Arrival at Sitcha.—New Events that had happened there.—Forced Parties to catch Sea-Otters.—Stay at Sitcha.—Departure from thence.—Arrival at Kodiak.—General Remarks upon that Settlement.

Our Commander, the Baron Von Resanoff, at length, after much trouble and negociation, succeeded in getting on board the Juno four thousand two hundred and ninety-four measures of corn, with a large quantity of flour, pease, beans, and maize, together with a few casks of salted meat and a small provision of salt, soap, tallow, and some other articles. For all this he gave in exchange merchandise to the amount of twenty-four thousand Spanish dollars. I was somewhat surprized that, instead of so very large a proportion of corn, he did not rather take more salted meat, as it was of an excellent quality, and much cheaper. It is however a certain fact, that a Russian always prefers a piece of bread to a proportionate quantity of meat, and M. Von Resanoff probably thought that in procuring the means of having plenty of bread he had superseded all other wants.

The Promüschleniks, who are accustomed at Sitcha to feed only on fish, and the fat of sea-dogs and whales, on berries and saranna, with sometimes a little rice, found their health very

much recruited from being fed with wholesome meat and pulse, and were soon entirely cured of the scurvy. A fat bullock was sufficient to support the whole crew for three days, and it cost only four Spanish dollars; indeed, so great was the abundance of cattle in New California, that it was found much cheaper to feed the sailors and Promüschleniks with meat than with vegetables or pulse; even bread was dealt out to them so sparingly, that they at last grew tired of having nothing but meat, and began to long for pease, beans, or other pulse, by way of variety.

It was, in truth, not a little astonishing to see the rapid effect produced in our people by a change in their diet. Even those who when they left Sitcha had the scurvy to the most frightful degree, soon after our arrival at St. Francisco, began to have healthy countenances, and in a fortnight or three weeks their colour and strength was so perfectly restored, that nobody could have supposed them the same people who had left the settlement such miserable, pale, lean, emaciated figures. A short time before our departure from St. Francisco, some of them were attacked in a slight degree with inflammatory rheumatic fevers, so that when we sailed, we had fifteen of the crew ill; but the illness was of very short duration; they were soon able to resume their business.

On the tenth of May, old stile, we quitted the harbour of St. Francisco, full of gratitude to the amiable family of Arguello for all the kindness and hospitality we had received from them, and which remained undiminished, notwithstanding the length of our stay. To the excellent Governor Don Arrelaga, who

had so kindly forwarded our views, we were no less indebted; nor must I omit to acknowledge the friendship shewn us by the missionaries. Among them I must particularize Father Joseph Uria, and pay him a more especial tribute of acknowledgment for the many instances of benevolent attention that he shewed us. If sometimes there might be an appearance as if he acted from interested motives, this was a feature in his character which, under the circumstances of his situation, was rather to his honour than otherwise, since any advantages he might derive from his intercourse with us could not be for himself personally, they could be only for the children of his adoption, the Indian converts.

It was about four in the afternoon that the anchor was raised, and we got under way. In passing the fort, we saluted it with seven guns, and the salutation was returned with nine. The Governor, with the whole family of Arguello, and several other friends and acquaintance, had collected themselves at the fort, and wafted us an adieu with their hats and pocket-handkerchiefs.

We now considered ourselves not only as on our return to Sitcha, but to Europe, and this idea increased in no small degree our spirits and animation. At our departure we were obliged at first to steer directly westward, on account of the wind being steady to the north-west. The weather was variable, sometimes clear, sometimes cloudy and foggy; the sea was very dull, and for the first three or four days of the voyage we scarcely saw a single bird, or any other living creature.

The eighteenth was the first day after our leaving St. Fran-

cisco that the wind was entirely favourable to us: according to an observation taken at noon we were then in latitude 37° 49′ north, longitude 132° west. On the following day, we saw a good many whales and turtles, and the sea was quite alive with salpæ, beroes, and other sorts of mollusca. Towards evening we saw several peterels; but though they are always considered as the forerunners of a storm, there was no appearance of the wind rising.

On the twenty-first, I was awakened very early in the morning to see a new and most curious spectacle. At the distance of about two miles, there appeared an extraordinary movement in the sea, as if we had been near a reef of rocks on which the surge was breaking with great force. On a more accurate examination, however, we ascertained it to be occasioned by an immense shoal of seals to the amount of many thousands, which came from the north-west, and were swimming in a south-easterly direction. As far as we could judge by their manner of swimming, and by what we could see of them, as they frequently raised their heads considerably above the water, they appeared to be the species to which is given the name of sea-bears, *phoca ursina*. The convoy extended such a length of way, that it occupied a line of full two sea-miles. This phenomenon appeared to me the more extraordinary, as I had hitherto believed these animals always to move northwards at the approach of summer, and to return again towards the south against winter; it is even now an enigma to me whence they came at this moment, and whither they were going. It seems not altogether impossible, that, alarmed at the attacks made upon them by the Russian Promüschleniks,

they were frightened away from their usual summer abode in the north, and were seeking an asylum elsewhere;—or was it that they were inhabitants of some hitherto undiscovered island in this neighbourhood.

On the same morning I observed another very remarkable phenomenon. The current of wind at different heighths in the air was very disproportionate; the sea was perfectly calm, and almost as smooth as glass, and the lower sails hung totally loose while the upper were so filled with wind, that by means of them alone we ran at the rate of six miles an hour. The wind was south-west, and the thermometer stood at 13°. We were then in latitude 39° 49′, longitude 133°.

From the twenty-second of May, we proceeded several days with a favourable south-west wind, amid alternate showers, squalls of wind, thunder and lightning, fog, and sunshine; while the great difference in the degree of warmth, the thermometer being now only at six and a half, plainly indicated that we were getting into more northern regions. From the twenty-sixth we had again, for the most part, north and north-west winds; on the twenty-eighth we, very unexpectedly, saw Cape St. James, the southern point of Queen Charlotte's Island: a current had, most probably, carried us farther northwards than we were aware. We had not at this moment any of the usual signs of being near land, we saw not a single bird, nor a morsel of sea-weed. It may, however, happen sometimes that a vessel may be near the coast without any of the usual signs of land appearing, while on the other hand, the usual signs of being near land may be observed, without being really in the neighbourhood of any.

On the twenty-ninth, during a perfect calm, the surface of the sea was overspread with an oily appearance, which we had no doubt proceeded from the number of whales about the vessel. There were also great quantities of sea-weed floating around us, and great numbers of mollusca of different kinds: we were now in the fiftieth degree of latitude. The calm continued for several days, and it was not till the fifth of June that a south west-wind arose. On the following afternoon we discovered land, which we supposed to be Cape Ommaney, the southern point of the Archipelago of King George the Third. This cape is also known by the name of Cape Tschirikoff. Our observation, at noon, gave 55° 3′ north latitude, 137° western longitude. On the seventh we saw, at a great distance, in a very clear horizon, a high chain of hills, and were convinced, by an observation taken at noon, which gave us 56° 49′ latitude, that a high rounded peak we had constantly had in view the whole morning, and supposed to be some detached island, was Mount Edgecumbe, which bounds the entrance of Norfolk Sound. On the eighth, in the afternoon, when we were within twenty or twenty-five sea-miles only of the Russian settlement, a dead calm came on. We fired several guns, and in the evening saw some baidarkas coming towards us: the rowers looked like living skeletons, they were so starved and thin, and formed a striking contrast with the plump, well-fed sailors we brought with us from St. Francisco.

Being, in the first place, anxious for news, and to know what had passed at the settlement during our absence, we received the following intelligence. That ten men had died in a most wretched state with the scurvy, since our departure; that the ship Elisabeth, which was sent to Kodiak, as related in the

fourth chapter, had been wrecked as it came out of the harbour, and both vessel and cargo were entirely lost, the crew alone were saved; that the Russians and Aleutians, at Jakatak or Behring's Bay, had been fallen upon by the Kaluschians and were all massacred, and for want of vessels and hands the settlement had been abandoned, no one having been near it for two years.

During our absence a ship had arrived at Sitcha from Boston in New England, under the command of Captain Winnship. With this captain the Russio-American Company had made an agreement that he should have fifty-two baidarkas and more than a hundred Aleutians placed at his disposal, to accompany him to the coast of New Albion, north of the Spanish settlements, and catch a cargo of sea-otters at half the usual price. Thus did the Russians endeavour to supply their want of ships and men, and to extend, by new means, the circle of their valuable fishery for sea-otters. A small ship of about sixty tons, the keel of which had been laid down some months before, we learnt was not yet finished, though thirty or forty men had been constantly at work at it the whole winter.

Of a large party for catching sea-otters, consisting of an hundred and forty baidarkas, and near three hundred Aleutians, which was sent from Sitcha to Kodiak in November, 1805, no tidings whatever had been heard. According to the latest accounts from Kodiak, the party had never arrived there, and there was the greatest reason to apprehend that they had all been sacrificed to the hatred and vengeance of the Kaluschians.

In the time of Vancouver's expedition, many parties of the same kind, and even more numerous, were sent in quest of sea-otters. This navigator met, among others, a flotilla, which, according to the assertion of the commander, a Russian, by name Portoff, consisted of seven hundred baidarkas and fourteen hundred Aleutians. This instance may serve to shew how much the country has been depopulated within twenty years; at present the Russio-American Company, in all their settlements, cannot muster four hundred baidarkas.

The unfortunate party above mentioned, was the most numerous that had been collected in the present times. After passing the summer in Chatham Street and Cross Sound, catching sea-otters, they were sent in October to Kodiak, that is to say, they were to fish all along the coast by Prince William's Sound and Cook's River, as far as the fifty-seventh degree of latitude, and then return southwards to Kodiak. They were consequently to perform a voyage of sixteen degrees of longitude, comprehending also three degrees of latitude, and return again the same distance, in their frail leather canoes, and that too at a time when the winter was already pretty far advanced. The consequence was, that the greater part of them, as we afterwards learnt, were lost in the storms that rage in these parts at that time of the year, or starved to death with the cold: only thirty baidarkas, and about sixty men were saved.

This practice of sending the Aleutians in parties to catch sea-otters has cost great numbers their lives, and is a principal cause of the depopulation of the Aleutian Islands. Even if

the parties are successful, and the poor creatures at length return, the excessive fatigue they have undergone by continual rowing and other exertion, commonly ends in inflammation upon the lungs, from the effects of which they die sooner or later. Full of the news we had received, which was not indeed of a very satisfactory nature, we entered New Archangel very early in the morning, on the ninth of June.

Lieutenant Maschin, who commanded the ship Maria, had, before our departure, received orders to prepare his vessel for sailing the beginning of May, to Ochotsk, to carry Captain Dwolf thither according to the agreement made with him upon the purchase of his ship the Juno, and her cargo. To our great surprise, however, at our return we found the Maria and our American friend still here; the latter appeared exceedingly dissatisfied at having been detained so long, losing his time for no purpose whatever. Lieutenant Maschin justified himself by complaining, on his side, that the ruling powers would not allow him the hands requisite for navigating the ship, which alone prevented his sailing, as the vessel had long been ready.

On our arrival, Captain Dwolf applied immediately to M. Von Resanoff, urging him, as the Plenipotentiary of the Russio-American Company, to fulfil the agreement which had been made with him the September before, relative to his being transported to Asia. After many plans being formed and rejected, it was at length determined that a small vessel of forty-two tons, the Rossüslaff, should be placed entirely at his disposal, in which he might go to Kodiak, and there take in a pilot to navigate the vessel the rest of the voyage. In case he should

find in his way to Kodiak that the vessel was too small to answer his purpose, he could then wait for the Maria, which was to sail in another week, and touch at that island in her way to Ochotsk. All the necessary orders for carrying this agreement into execution were immediately given, and Captain Dwolf used so much dispatch in preparing the ship for sailing, and taking in the necessary supplies of provisions, wood, and water, that in three days she was ready to depart.

All was now bustle and activity at Sitcha. The Juno was unloaded, and M. Von Baranoff, the superintendent of the Russio-American Company, rejoiced exceedingly at seeing the large provision of corn brought by the Chamberlain. He only regretted that there were no mills in the settlement to grind it; a circumstance which had never occurred to our Commander when he made his purchases. The corn was therefore in part eaten roasted, after the fashion of the Indians in New California; partly boiled in soup, instead of oatmeal or rice.

The building of the new ship mentioned above, the keel of which had been laid the autumn before, now proceeded with the utmost diligence, so that a prospect appeared of her being entirely finished in a few weeks. She was called the Awos*. M. Von Resanoff resolved to remain at Sitcha, till she was finished, and having appointed Lieutenant Davidoff to the command of her, he purposed going himself in the Juno, under the command of Lieutenant Schwostoff, accompanied by the Awos to Ochotsk.

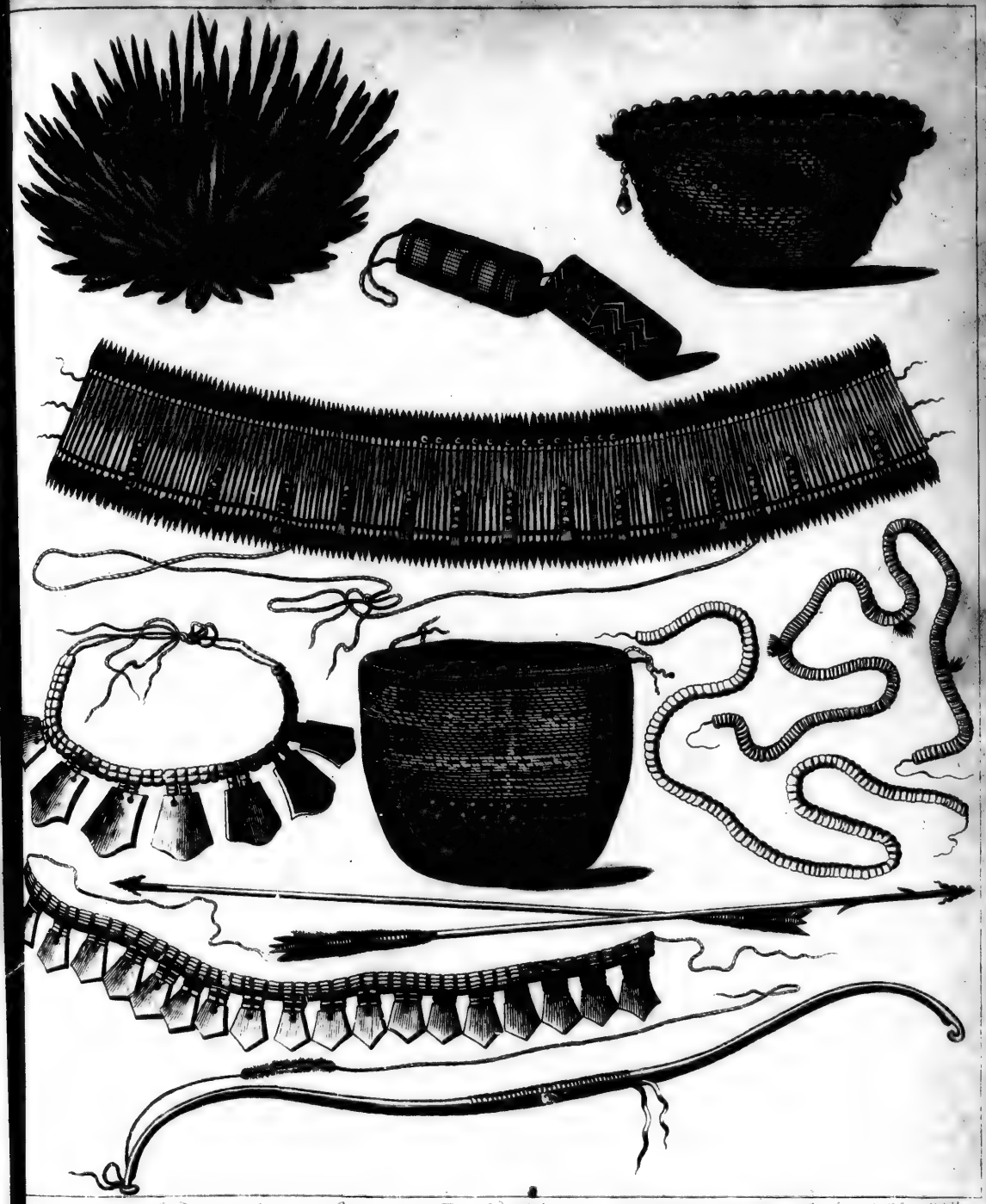
* That is, the *Perhaps*.

The political situation of New Archangel was at this moment very critical. Certain intelligence was received that a few days before the return of the Juno, the Kaluschians had assembled in great numbers in their fortress with the intention of storming the Russian settlement, and murdering all the inhabitants. The unexpected arrival of the Juno, however, alarmed them, and deterred them from prosecuting the attempt; but it was not abandoned without threats that it should be carried into execution at a future period. It was known besides that four baidarkas, which had been sent in search of the unfortunate sea-otter party, had fallen into their hands, and that six persons had been sacrificed to their vengeance. A great deal of discontent also reigned at this time among the Russian Promüschleniks. Most of them were now in a state of convalescence from the scurvy, partly owing to the season being more favourable, partly from being much better fed by means of the supplies we had brought. Their chief causes of complaint were the extreme hard labour to which they were kept, and the scanty portions of fresh fish dealt out to them, notwithstanding the immense quantities that were constantly taken. As they laid a formal complaint to this effect before the Chamberlain, he gave orders that they should be excused all work whatever the next day, and do nothing the whole day long but eat fresh fish.

I, for my part, had been long enough at Sitcha. Tired of living upon fish, shell-fish, and sea-dogs, I had for some time determined that I would depart with the first ship that should sail for Europe; and this determination I had already communicated to M. Von Resanoff. Though there was nothing very tempting in the vessel now awarded to Captain Dwolf,

which was built by the Promüschleniks of America, and of only forty-two tons burthen, yet rather than remain an hour longer than was necessary at Sitcha, I determined upon adhering to my resolution, and agreed to accompany him, notwithstanding the many friendly remonstrances made me upon the subject by several different persons. Indeed it must be owned that this was rather a small vessel to traverse an extent of eighty degrees of longitude, and sixteen of latitude, the distance between Sitcha and Ochotsk. The Chamberlain, not wishing to put any constraint upon me, furnished me with the necessary papers and recommendations to Ochotsk, Jakutsk, Irkutsk, and other places on my route, and thus prepared, I departed from Sitcha on the nineteenth of June, in company with my friend Captain Dwolf, and ten sailors; three of the latter were natives of the Peninsula of Alaksa. Seldom has a *Te Deum* been sung with warmer feelings of gratitude than I felt upon this occasion; I seemed inspired with new life, I felt as if I breathed more freely when I had completely lost sight of Mount Edgecumbe.

The wind and weather were at first by no means favourable. The almost constant north-west, and south-west winds, or calms, which prevented our making much progress, would have rendered our voyage very wearisome and *ennuyeux*, if we had not occasionally made little parties in the baidarkas we carried with us, to pursue any thing that came in our way. Almost every day we saw a quantity of sea-weed and some whales. The sea was very irregular; the short waves which seemed to hurtle against each other, were probably occasioned by the wind being in opposition to a strong sea current. The latter, when we were in the neighbourhood, carried us in twenty-



Swaine Sc. 1º Queen St. Gold.

Various objects from New California and Norfolk Sound.

Published March 5.1816 by Henry Colburn, Conduit Street London.

four hours between fifteen and twenty sea-miles southwards: along the coast of America; however, as far as Cook's River, it seems to set to the north.

In this voyage, and quite out at sea, I saw the following birds.---*Alca arctica, alca cirrhata, procellaria furcata, procellaria glacialis, procellaria æquinoctialis*, and *diomedea exulans*. At the distance of between twenty and thirty sea-miles from the coast, were the following among several others.---*Pelecanus violaceus, colymbus grylle, colymbus troile, larus furcus*, and *sterna hirundo*.

It was not till the sixteenth of July that we first saw land, and the next day, towards noon, we cast anchor in the new harbour of Kodiak. My old acquaintance, M. Bander, met us upon the shore, and received us with the utmost hospitality. To my great concern he informed me of the sudden death of his beloved wife, the lady whose knowledge in gardening and cookery I have celebrated so much in the account of my former visit here. She seemed to have fallen a victim to the spirituous liquors brought by the Neva; not by drinking of them to excess, but her constitution was naturally not strong, and having been long wholly unaccustomed to spirits, even the smallest quantity was injurious to her. She had now been dead some months.

Though the well-laid plan of M. Von Resanoff was somewhat disconcerted by this loss, it had contributed not a little to the consolation of M. Bander, and to the alleviation of his sorrows. One of the young girls, educated by the deceased

Madame Bander, had, in the meantime, so extended her knowledge in household accomplishments, that in most instances she was able to replace her.

The settlement of Kodiak is already, in a considerable degree, known to the reader from the notices contained in the third chapter. It was founded by Gregory Schelikoff. The island is large, and was formerly very populous; it is surrounded by rocks, some higher, some lower, intersected with many creeks, bays, and harbours. The interior of the island consists of alternate mountains and vallies, hills and plains. The climate is infinitely milder than might be expected, and it seems as if the eternally snow-clad mountains and glaciers of Alaksa keep the cold off from Kodiak. Breeding cattle has, under the care of M. Von Baranoff, succeeded extremely, but hitherto the Russians only, and not the Aleutians, have received any advantage from it. If there were more labourers, and some persons well acquainted with husbandry to direct their labours, there is no doubt but that the soil would be very productive. The potatoes planted here make very large returns: care only should be taken to procure seed of a better quality. Some Promüschleniks have already applied themselves to agriculture, but I must observe, with deep regret, that they had got a very wretched plough, and that instead of oxen the miserable Aleutians were compelled to draw it. It is much to be lamented that the stewards of the Directory at St. Petersburgh do not think proper to interfere in these and the like detestable practices.

In the countries that I have seen, where negro slaves are

employed in the labour, great care is taken to feed them well, and keep them in health, since they must be purchased at a high price; but the case is otherwise here. The poor vanquished and enslaved Aleutians are ill-fed, ill-clothed, and perpetually thrown into situations where their lives are in danger; they are deprived of all their property, and are commonly governed by Promüschleniks, who are for the most part criminals from Siberia: under all these circumstances the depopulation must advance rapidly. Scarcely any of the native Aleutians are to be seen, excepting superannuated old men, with women and children: the men capable of working are sent continually on hunting parties for sea-otters, and are thus separated from their families for months together.

The settlement at Kodiak has, by degrees, assumed the appearance of an European village; it contains about thirty dwelling-houses, a church, warehouses for merchandize, barracks, workshops for mechanical trades, &c. &c. In the latter years a school has also been erected, and it certainly does honour to the Russio-American Company that they have made such a provision for instructing the rising generation, in religion, in reading, in writing, accounts, mathematics, and other useful branches of knowledge. The best intentions may however often be attended with unfortunate consequences, and this appears to be the case here. M. Von Resanoff, in establishing the school, forgot to make any proper provision for feeding the scholars, the number of whom is about seventy. While these youths were at home with their parents they were employed in catching fish and sea-dogs, and thus contributed towards the support of their families and of the Company. Now occupied with

their studies, there has been in many places, the whole summer through, much less fish taken than formerly; besides this, the supplies delivered to the Juno for the support of the settlement at Sitcha, and the loss of the ship Elizabeth, so diminished the stores of provisions at Kodiak, that there was really a scarcity, and during the whole winter, the school-boys were necessarily kept extremely short of food.

However laudable therefore the idea of this school may appear, and however important it is that the Aleutians should be instructed in religion and good morals, I cannot help contemplating the whole matter in a very different point of view from what appears on the face of it. Why must the Aleutians be instructed in reading, writing, and other acquisitions of the like kind?---Kodiak is at present extremely depopulated; instead of the little remnant of the youth being instructed in the use of the bow and arrow, and in rowing, of their being taught to fish, to catch sea-dogs, and to become laborious and useful citizens, they are all taught to read, to write, and cast accounts; they are taught mathematics, geography, and the French language. ---They are, in short, educated and taught accomplishments after the European fashion, and in a few years there will not be a young Aleutian remaining who will go barefooted winter and summer, defying the cold, to catch fish or in pursuit of whales, sea-dogs, sea-lions, and sea-otters.---What will the Company then do with their learned Aleutians, or where will they find people to go upon these employments so necessary for the general support of the community?---These perverted ideas had already taken deep root, while the principal direction at St. Petersburgh was still ignorant that the germs had begun to appear.

CHAPTER XII.

Departure from Kodiak.—Schelikoff's Straits.—Coast of Alaksa.—Bay of Kukak.—Description of the People and their Habitations.—Departure from Kukak, and Voyage to Oonalashka.—Account of a New Island lately formed in this Neighbourhood.—Departure from Oonalashka, and Continuation of the Voyage.—Obliged to Winter at Kamchatka.—Arrival in the Harbour of St. Peter and St. Paul.

HAVING received an ample supply of fresh meat, fish, wood, and water, through the kindness of M. Bander, and the pilot which had been promised to Captain Dwolf having come on board, on the twenty-fourth of July we left Kodiak to proceed on our voyage. A strong south-east wind rendered it impossible for us to double Cape Greville, so that our pilot recommended steering northwards, and going through the channel that separates the island of Kodiak from the peninsula of Alaksa, known by the name of Schelikoff's Straits. Three of our sailors being natives of Alaksa, were consequently well acquainted with these straits, and they assured us that the navigation was perfectly free and safe.

Leaving the island of Kodiak therefore to the west and south-west, we sailed northwards between that and the two little islands of Jellowa (Fir-island) and Aphoknak. This passage is not more than a sea-mile in breadth, but so deep, that

the largest ships may sail through it in perfect safety. Opposite to the middle of the entrance, at the distance of several sea-miles, lie a cluster of rocks, which may easily be avoided with a tolerable wind. The current of the ebb and flow is very trifling. We were constrained by a calm to run in the evening into a bay on the north-eastern side of the channel, and cast anchor in eight fathom water. Early in the morning of the twenty-fifth, we again proceeded forwards along the channel, which stretched directly from east to west, and is bounded to the north by the island of Jellowa, to the south by Kodiak, and to the north-west by Aphoknak.

After steering between three and four sea-miles directly to the west, a large bay opened upon us; the coast of Kodiak, which we followed, formed itself alternately into creeks and harbours. Farther to the north-east we saw some islands, the names of which we never could learn, and between these and Kodiak the entrance of a strait, which leads into the spacious channel called Schelikoff's Straits. Notwithstanding that the channel was now full two miles over, the current was much stronger than in several of the narrower parts. During the whole night, and for a great part of the next day, we were constrained by contrary winds to cruize about a widely-extended bay, in the neighbourhood of the mouth of Schelikoff's Straits, and every where along the shore we found good anchorage. We could not help being surprised, that since we quitted the harbour of Kodiak, we had never seen any signs of habitations or inhabitants, neither along the coast of the peninsula, or upon any of the islands.

At length, in the night, a favourable wind sprung up, so

that by break of day we entered Schelikoff's Straits: this passage in the narrowest parts is about forty versts in breadth. The favourable wind in which we had rejoiced so much was of no long duration: in a few hours we were again tormented with a strong south-west wind, which at length rose into a violent storm, so that we were obliged to run for shelter into a neighbouring bay. The Alaksans, whom we had on board as sailors, assured us that on the southern shore of their peninsula there were several very good harbours; among them, that of Kukak to the north-east, and Karluk to the north-west, at the mouth of the Straits, they said, were to be particularly recommended. We therefore directed our course under a storm-sail to the spacious bay of Kukak, which lies to the north of the island Aphoknak. In the afternoon, having reached the still water in this bay, we had scarcely cast anchor before some baidarkas came towards our ship, which being the first that had ever run in here, of course excited the attention of the inhabitants that lived near the shore. These people differ very little in their external appearance from the natives of Kodiak, excepting that the men do not pluck out the hair of their beards, but clip them in the old Spanish fashion into small mustachios between the nose and chin, and leave only a small part of the beard in the middle of the chin.

A friendly confidence and an unusual kindness of heart was conspicuous in the behaviour of these people. They conducted us into the inner bay, where we cast anchor in the evening about eight o'clock, on a stony bottom in six feet water, and were entirely sheltered from the south-west wind. The gusts, however, that came every now and then over the neighbouring

hills, excited so much apprehension in Captain Dwolf, that he thought it prudent to throw out a second anchor.

Early the next morning we were visited by several of our acquaintance of the evening before. Every one brought his wife with him, to treat her with a sight of such very unusual guests, and an European ship. Two young girls had got into the inside of a two-seated baidarka, and when we thought it quite empty, we saw their heads on a sudden popped out at the holes to stare at us. Both the men and women upon our invitation came on board without any apprehension, and brought us fresh fish, with many trifling objects, such as bags made of the windpipes of birds and sea-dogs, or of fish-skin, thread and slings for arrows made of the tendons of whales and rein-deer, very neat baskets, caps of weasel-skins, ornaments for the lips and ears, &c. &c. which they bartered for tobacco, glass-beads, and needles. The traffic was carried on without the least difficulty, and seemed to give entire satisfaction to both parties.

As the wind continued to be tempestuous, so that we could not venture to leave our sheltered anchorage, Captain Dwolf and I took advantage of the detention, and ascended a hill upon the small island of Ilak, near us, to look over the country, and make a sketch of the bay. In the west and north-west lay very high mountains covered with eternal snow and glaciers; directly in the north the hills were not so high;---to the east was the mouth of the bay, to the south-west the creek of Ichock, which runs behind a neck of land so far into the interior of the country, that though we could see several miles,

we could not discern the end of it. At our return we resolved to make use of our baidarkas for visiting the summer-huts of the natives on the north-east shore of the bay, not far from the promontory of Amawack, at the distance of about a sea-mile.

We were received by the inhabitants in the most kind-hearted and friendly manner. Their habitation was small, and covered with earth grown over with grass: the entrance was so low, that we could only get in crawling upon our hands and knees. The family were all seated round a fire, which was burning in the midst of the hut, and on which hung a kettle, where they were cooking fish. Some small salmon were spitted upon a little stick, which was stuck into the ground near the fire, and by this means they were roasted; we were regaled with some of these cookeries, and saranna root; the latter had to us a disagreeable taste, a sort of mixture of sweet and bitter. Opposite to the door the floor was strewed with chips and hay, over which was laid some clean sea-dogs skins, and here we were invited to sit down. The habitation was upon the whole much cleaner than any we had seen at Kodiak. In our conversation we learnt that the place had been much more populous, but that the population had decreased in the last ten years, most of the young people having been carried away to Sitcha to hunt sea-otters: indeed, we observed that here, as at Kodiak, we saw chiefly old men, women, and children. Of a thousand men who formerly lived in this spot, scarcely more than forty remained, and the whole peninsula of Alaksa they said was depopulated in the same proportion. In the village of Toujajak, where we were, there were now only four two-seated baidarkas, and one baidara, belonging to the community.

The latter attracted our attention very much: its form and the symmetry and neatness with which it was made were far beyond any we had yet seen, and we were surprized that the Russians had not built their baidaras after this model.

The customs, the manners, and in a great degree the clothing and language of the Alaksans, are the same as those of the people of Kodiak. The object in which they diverge the most from each other is in their food. The Alaksans joining on to the continent catch a great many rein-deer and wild sheep; these constitute a principal part of their food and clothing; they are taken chiefly in the autumn. The men seem as little jealous of their wives, as the young girls are backward in bestowing their favours. A handful of beads, some leaves of tobacco, or other European trifles, above all, half a dozen fine sewing needles, were sufficient to remove all difficulties. The physiognomy of some of the girls was really not unpleasing, though very much deformed by the lip-ornaments and by the tattooing of the chin. The winter must be very cold here, and of long duration.

On the twenty-ninth, in the morning, as the weather had cleared, we weighed anchor, intending to leave the bay, but were detained by a calm which succeeded almost immediately. From an exceedingly good observation, which we had the opportunity of taking at noon, we determined the bay to be in latitude 58° 32′. The Alaksans of both sexes, delighted at the calm, came once more in their boats to visit us, and brought fresh fish with several presents of their household utensils and tools, in the hope at once of gratifying our curiosity,

and of receiving presents from us in return. A light south-south-west wind, which sprung up in the evening, served to carry us out of the bay into Schelikoff's Straits. In the remainder of our progress through this channel we had very changeable winds, so that we made our way very slowly, and did not finally lose sight of the Island of Kodiak till the first of August.

As we had found, ever since we quitted the harbour of Kodiak, that these parts are very incorrectly laid down in all the Russian maps, we were obliged to proceed with great caution, maintaining an almost constant struggle against the west wind. On the fourth we descried some islands, the northernmost of which we supposed to be Sutchum, and towards noon, a single dangerous rock, about fifteen or twenty sea-miles distant from the coast of Alaksa, in latitude 56° 2′, according to our observation, though in Sarytscheff's charts it is laid down eleven minutes farther to the south. In the neighbourhood of it every way were immense shoals of sea-dogs and sea-lions. Amid very variable weather we continued our course in the direction of the narrow peninsula of Alaksa, the high snow-clad mountains, and rounded peaks of which we could, at intervals, see very distinctly, and, on the seventh, arrived in a large bay not far from the Straits of Isannach, which separate the Island of Unimak from the extreme point of Alaksa. The entrance to these straits may be known by the small Island of Ikatok, which lies a little to the south of it.

On the following day we were off the south-western point of Unimak, in latitude 54° 38′, and here we were detained several

days by a south-west wind, till, on the tenth, we were carried by a strong current from the north-west through the channel between Unimak and the Island of Akutan, by which our passage into the sea, to the north of the Aleutian islands, was extremely facilitated. About two in the afternoon we had a visit from some of the inhabitants of the western coast of Unimak; they brought us a very acceptable supply of holybutt, and were in return presented with some leaves of tobacco. This occurrence was doubly agreeable to us, since we got on so slowly, that in several weeks we had scarcely performed a third part of our voyage, and observed our provisions daily diminishing. Owing to this circumstance, our commander, Captain Dwolf, had been obliged to determine on stopping at Oonalashka, a thing which he would otherwise gladly have avoided on account of the delay it must occasion. On the eleventh we came in sight of Oonalashka, and the next day anchored in the harbour of Illuluk.

High and steep hills, with large clefts, form a deep bay open to the north, which leads immediately to the harbour. This is to be known, at a considerable distance, by a table mountain lying directly in front of it; it is sheltered on all sides, and has excellent anchorage on a sandy bottom mingled with clay, and as the shore slopes considerably, vessels may be moored in from two to three fathom water very near it.

The Company's steward, Emilius Gregory Lariwanoff, a very respectable old man, who has been mentioned on the occasion of my former visit here, had died the beginning of this year. The integrity and philanthropy with which he uniformly con-

ducted himself during ten years that he continued in his office, had justly gained him the love and respect of all the islanders. Under his stewardship, this was undoubtedly the best conducted of all the Russio-American Company's settlements. The universal harmony and content which reigned in the island had been less striking to me at the moment when I witnessed it than it was now in the recollection; I had not then seen the rest of the settlements. After the death of M. Lariwanoff, the superintendence was confided to the principal person under him, by name Prikaschtschik; but so far was he from walking in the steps of his predecessor, that, in only six months, instead of order and unanimity, every thing was turned into a chaos.

The new steward thought it necessary to usher in the commencement of his administration with novelties, and in the ardour of doing this he never thought of the consequences that must inevitably follow the measures he was pursuing. Although he knew perfectly well that tall trees are things not produced either by Oonalashka, or any of the neighbouring islands, that they depend for a supply of wood principally upon what the sea drifts thither by chance, this did not prevent his immediately beginning to build a large timber house after the Russian fashion. For this purpose he laid violent hands upon all the wood which had been brought for several years from Sitcha, Kodiak, and other places. As the supply had for some time been very scanty, the stores were not ample, and had been used with the utmost caution, only for purposes where it was absolutely indispensable, such as for the main supports of the earth huts, for building baidarkas, for spears, and the planks from which they are lanced, and for some sorts of household

utensils. Besides, since the Aleutians understand little or nothing of the Russian mode of building, all the Russians, scattered about this and the other islands, were summoned to lend their aid in forwarding so important an undertaking. The wood was thus expended in the most lavish manner, and all other business thrown into entire confusion.

M. Lariwanoff had, for six years, been constantly requesting permission of the principal agent of the Russio-American Company, who resides at Kodiak, to return with his family to Russia; but this had always been evaded under some pretence or other. When the Chamberlain Von Resanoff was here, he gave positive orders that these worthy people should be conveyed to Ochotsk by one of the Company's ships. These orders, as far as concerned poor M. Lariwanoff, were now rendered void, but his widow thought she had a just claim, after the death of her husband, to the fulfilment of the orders for herself and her daughter. The new steward, however, was not disposed to attend to her claims, and sending away the ship St. Paul and St. Matthew, which had been destined to carry her husband, said that the Company could not spare ships for women.

When Madame Lariwanoff heard that Captain Dwolf was bound for Ochotsk, she entreated him to have compassion upon her, and let her have a passage in his vessel: this he knew not how to refuse, as he thought her case really hard and pitiable, and he therefore consented to the request, although a ship of only forty-two tons was not calculated to accommodate many passengers, particularly women. No sooner did the steward

hear of this arrangement than he endeavoured to raise difficulties; they were, however, obviated by the captain, and Madame Lariwanoff, with her daughter, and all her property, were received on board his ship.

As our principal business at Oonalashka was to procure a supply of food, in this respect our new passengers were of great assistance to us. Madame Lariwanoff brought on board a considerable quantity of salted fish and geese, some hams, which were indeed but lean and oily, several casks full of bird's eggs, some fowls, roots, and other productions, which she had collected as winter stores. It was not without a good deal of trouble that we procured from the steward some necessary articles for repairing the ship, and a small supply of fresh fish. Even these we should probably not have obtained, but that he was anxious to redeem a cask of brandy which had been sent him by M. Bander, and Captain Dwolf would not accept of any other payment for the transport. We had, indeed, no reason to think that his fine house afforded him very good fare, since during the five days that we remained in the harbour, whenever we saw him he appeared half famished.

Of the particular customs, habits, and modes of life of these islanders, of their cloathing, and of the productions of the country, I have spoken at large in the second chapter of this volume, and have nothing particular to add upon this occasion. But to what is there said upon the subjects of physiology and natural history, I must subjoin some curious particulars relative to a new island which has appeared within a few years in the neighbourhood of Oonalashka.

The appearance or disappearance of a considerable tract of land is indeed by no means an unprecedented phœnomenon among the physical revolutions of our globe; but since it has rarely happened, when such an event has taken place, that an opportunity has been afforded for observing the progress of it accurately, the following instance deserves to be particularly mentioned. In the fifty-fourth degree of northern latitude, and the two hundred and sixty-eighth degree of longitude, west of Greenwich, and about forty-five versts to the west of the most northern point of Oonalashka, had long stood an insulated rock, which, the Aleutians say, was always in the times of their forefathers one of the great resorts of the sea-dogs and sea-lions, with which these parts abound.

In the year 1795, the islanders remarked a great appearance of fog in the neighbourhood of this rock, which did not disperse, although the rest of the atmosphere was perfectly clear; this gave the greater uneasiness to the people both of Oonalashka and Umnak, since they considered the rock as one of their great magazines of food. After vainly expecting for a long time the removal of the phœnomenon, and afraid, uncommon as such an appearance was, to venture near it; at length, one of the Aleutians, bolder than the rest, resolved to visit his ancient haunt, and endeavour to catch some sea-lions. He soon returned in the utmost terror and astonishment, saying that the sea all about the rock boiled, and that the supposed fog was the smoke or vapour that rose from it. Nobody would in consequence venture any more near the place; concluding, that instead of sea-lions and sea-dogs, it was become the abode of evil spirits. This continued for a considerable time, till at

length, about five years after, the fog suddenly clearing away, the Aleutians, instead of their rock saw an island, from which rose a high peak, in form resembling a chimney, with fire and smoke issuing from it as if it had really been one.

At the same time that the vast abyss of the sea, the great workshop of nature, was in this state of activity, repeated shocks of earthquakes had been felt for some months at Oonalashka: the last, in the year 1802, was so violent as to destroy a considerable number of the earth huts; there was no one, who in 1806, when we were there, could ascertain in what month this happened. About the same time the peak on the new island ceased for awhile to blaze; but a volcano at Oonalashka, which had been quiet for many years, broke out again with great violence, and this, with that upon the new island, and another upon the island of Unimak, have since scarcely ever ceased to burn or smoke alternately. A volcano in Umnak, a little island to the west of Oonalashka, has for some years been entirely extinguished.

Some inhabitants of Oonalashka, in the month of April, this year, consequently not a very long time before my arrival, had visited this island, going in three baidarkas, and gave me the following account. They were about six hours rowing round it, which supposes a circumference of about thirty versts. They could not ascertain the heighth of the peak with any precision, but were of opinion that if it had been possible to climb directly up to the highest point, they could not have done it in less than between five and six hours. The volcano was burning on the north side, and the lava, which they represented as a soft matter,

ran down the side into the sea. It was impossible to land on account of the heat: on the south side of the island alone, where the shore was not so steep, and where the great heat of the volcano was not so much felt, could they effect a landing. They endeavoured to ascend the peak, but found the ascent extremely difficult on account of the steepness of the number of clefts, and the sharpness of the stones. When they arrived somewhat less than half-way up, they judged it more prudent to relinquish the undertaking, as the remainder of the way was much more rugged, and the ground began to grow very hot: as they descended, they observed a great deal of smoke and vapour rising from the holes and clefts they had left behind them. They stopped at a hole, whence issued a great deal of steam, and suspended in it a piece of the flesh of a sea-lion: after leaving it there a short time they drew it out, and found it cooked as if it had been set over a fire.

Becoming extremely thirsty, and not finding any water fit to drink, they were forced to return without any farther examination. It would never have come into their heads to bring away any of the stones found on this new island, if they had not observed a piece of native sulphur, which they thought might be of some use; the rest of the stones they said were of the same sorts as at Oonalashka. According to the farther testimony of the people at Oonalashka, the form and appearance of the peak vary from time to time; sometimes it seems high and pointed, looking like a vast pillar, sometimes lower and rounded at the summit; sometimes it sends forth a bright flame, at other times it only smokes, and the smoke is much greater at some times than at others. The

island seems constantly to increase in circumference, and the peak in heighth.

On the seventeenth of August, in the afternoon, we left Oonalashka, and the next day passed this new island: it is of a middling heighth, and rises quite to a peak. The centre point has on every side the appearance of a pillar, and seems entirely perpendicular. On the north-west side are four rounded summits, which rise one above the other like steps. We passed this remarkable spot at the distance of about twelve miles: as there had been a considerable fog, we were not aware of being in its neighbourhood; it was only when the fog cleared that we became sensible of it, and we had then nearly left it behind us. As we had now a favourable south-east wind, Captain Dwolf thought it more prudent not to lose the advantage of it in stopping to examine even such a phœnomenon; though it cost both him and myself no trifling effort of resolution to subdue our curiosity upon the subject.

Two days after we lost sight entirely both of this new island and of Oonalashka. The latter presents a very remarkable aspect on the west side. On the top of a high ridge of mountains rise at intervals vast perpendicular masses of rock, which, viewed in a direction from north-east to south-west, have the appearance of a regular row of enormous pillars*. During this part of our voyage we observed a more than usual

* An appearance of very much the same kind is mentioned in Dr. Lichtenstein's Travels in Southern Africa, as to be seen in a ridge of mountains near the Cape of Good Hope. See page 55 of the English Translation.

quantity of whales, and the sea was particularly luminous at night. Notwithstanding that when I was navigating in more southern latitudes, I had convinced myself upon a frequent and careful examination into this phœnomenon, that it was occasioned by living creatures of various kinds; yet here my faith was staggered. Surrounded as we were by an immense number of whales, I could not help doubting whether I ought not rather to concur in the opinion of some other naturalists, and ascribe it in great measure to the oily nature of these monsters. It does not however appear very improbable that the greasy particles proceeding from such vast bodies may engender and nourish immense swarms of minute living creatures, which occasion so very extraordinary and beautiful an appearance; in this way both opinions are partially reconciled. Having a very gentle south-east wind, with a good deal of fog and rain, we proceeded slowly, and sometimes saw a considerable tract of sea strewed over with feathers: this we attributed to its being the time of moulting among the vast numbers of sea-fowl that inhabit these regions.

Colymbus troile, procellaria farcata, procellaria glacialis, procellaria nigra, procellaria grisea, with several sorts of *larus,* flew daily about the ship in great numbers. The sort of *alca,* very common in many parts of these regions, known by the vulgar name of the sea-parrot, was seldom to be seen; perhaps it rather frequents the southern coasts of the islands. On the other hand, we saw here in greater abundance than any where else a particular sort of sea-mew, called by Linnæus the *larus parasiticus,* which never catches fish for itself, but watches for others of the species, and when it sees them catch one, pur-

sues and takes it from them. We had daily opportunities of seeing this tyranny practised, and were not a little surprized at observing that the other sea-mews, far from appearing to shun their persecutors, were always in company with them.

The wind was hitherto so slack that by the twenty-third we had scarcely made eight degrees of way. On the twenty-sixth, about noon, during a pretty brisk east wind, four wild geese, *anas canadensis*, came very near our ship. I watched my opportunity, and firing at them, brought them all down at one shot, to the great joy of myself and the company at the same table; they afforded us excellent *roti* for several days. Such a piece of good fortune is so rare in a sea-voyage, that it occasions double pleasure when it does occur. On the twenty-seventh, we had, for the first time since our departure from Oonalashka, a brisk and favourable wind; it carried us at the rate of five or six miles in the hour. In twenty-four hours we had run fifteen miles to the east of an island which we supposed to be Buldir, or the round island. According to an observation taken at noon we were in latitude 52° 37′. In the south-east we saw the island of Kiska, and farther to the west a pretty large island, most probably Agattu. For several days following we were again tormented with a calm, and the weather being very clear, we could see the islands all round us very plainly. On the thirtieth, being in latitude 52° 14′, longitude west 184°, the sea appeared as if dyed. The weather was very variable; we had a good deal of fog and rain, and, as usual, either unfavourable winds or a calm. A new stormy month had commenced, and we had not yet proceeded far on our voyage.

On the third of September, according to our observations,

we were in latitude 51° 51′, longitude 185°, consequently more than a degree south of the island of Attu, the most westerly of the Aleutian islands. The almost constant west winds rendered our progress so slow, that every day the probability increased of our not being able to reach Ochotsk this year, but that we should be obliged to stop at Kamschatka, and there pass the winter. On the fifth, however, a north-east wind rose, and for the first time since we left Sitcha, continued eight-and-forty hours, so as to carry us into the neighbourhood of the Kurile islands. This gave us new hopes, and flattered us with the prospect of yet reaching Ochotsk, the place of our destination, before the season was so far advanced as to shut up the navigation of that sea. Too soon however were these hopes damped, for the wind speedily changed again, and blew so violently at first from the north-west, afterwards from the west, that we could scarcely carry even the storm-sail. This was decisive of our fate: Captain Dwolf saw that it was in vain to think any longer of encountering the equinoctial gales with so ill-built and slow-sailing a vessel as ours, and accordingly, on the eighth of September, he altered his course, and steered directly for the harbour of St. Peter and St. Paul.

The next day, the weather being calm, I saw an albatross near the ship, and begged Captain Dwolf to let me have a baidarka, that I might go in pursuit of it. This he readily granted, and I set out accordingly with my gun, and an Aleutian as my companion: we got within about ten or twelve paces of the bird, when firing, I saw to my great joy that I had not missed my aim. Having taken up my prize, I looked around me; but what was my astonishment at finding that the ship was no longer in sight. A thick fog, which had suddenly

come on, concealed it from us entirely, and neither my companion or myself could tell what direction we ought to take, in order to reach it again: according to my calculation, I supposed that we must be about the distance of a sea-mile from it. Nothing remained but to row at random; and happily we had not proceeded far, when we could distinguish through the fog something which had the appearance of a black column: this I immediately concluded to be the object of which we were in search, and approaching nearer, we plainly discerned it to be so: we therefore rowed on with twofold eagerness, and soon arrived at it in perfect safety.---We had no small reason to be thankful for our escape;---had we not seen the ship any more, what might have been our fate! *

Though it was far from agreeable to us to be thus disappointed in our plans, and to be obliged to pass another winter in a part of the globe not abounding with the comforts and conveniencies of life, we consoled ourselves with the idea that we might at least hope to find a sufficient supply of the absolute necessaries, and to enjoy the society of some rational and civilized human beings. Yet the melancholy recollection of the last winter passed at Sitcha being still fresh in our minds, it was not without a great mixture of fears as well as hopes that we entered the harbour of St. Peter and St. Paul on the thirteenth of September, old stile, or the twenty-fifth, new.

The weather was extremely pleasant, and the atmosphere

* A circumstance of a very similar nature is related by the celebrated George Forster, as having happened to him in his voyage round the world.

perfectly dry: we had scarcely had any weather so clear and warm since our departure from Sitcha as the first few days after our arrival in Kamschatka. Though the high hills were covered with snow, the country below presented a lively and cheerful aspect; the more so, as at Sitcha and Kodiak there are nothing but fir-trees, not a tree with leaves upon it.

We had scarcely cast anchor, when we received from the Commissary of the Russio-American Company the agreeable information that there was at present in the warehouses about six hundred pud of rye-flour, with an ample stock of tea, sugar, butter, brandy, &c. &c. The obliging manner in which he offered his services to us, the good account he gave of his supplies, and the assurance that they still caught great plenty of fish, so that the whole crew might be well supplied with food, formed altogether a body of information extremely pleasing to our ears, nor could we help thanking Providence for having with so paternal a hand conducted us thither.

Great changes had taken place among the servants of the Russio-American Company since I was at Kamschatka in June, 1805. Commissary Wichegoff, who had been there for so many years, was at length, on account of the numerous frauds and impositions in which he had been detected, deprived of his place, and taken into custody, in order to be tried for them. The situation was at present filled by a person of the name of Miasnikoff, who was represented to us by all the inhabitants as a man of strict probity and integrity; indeed, his subsequent conduct justified the character, as he treated us the whole winter through with the utmost friendship and politeness.

By the next post that departed, I sent information, as I conceived to be my duty, to the Commandant of Kamschatka, Major-General Paul Iwanowitsch Koscheleff, of my arrival. At the same time I requested permission to repair to Nischney Kamschatka, the place of his residence, by the first sledges that should travel that way, and that he would afford me the necessary assistance to accomplish this journey. Captain Dwolf and I in the mean time hired a private lodging together. The Commissary Miasnikoff was so obliging as to provide accommodations for Madame Lariwanoff and her daughter, and for all the ship's crew.

CHAPTER XIII.

Observations upon the Peninsula of Kamschatka.—Climate.—Agriculture.—Breeding of Cattle.—Productions.—Beasts.—Birds.—Fish.—Berries.—Roots.—Forest Trees.

All persons of real knowledge who have taken any pains to examine the Peninsula of Kamschatka, all governors who have resided there some years, all navigators who have obtained an accurate knowledge of the country, agree in their reports respecting the goodness of the climate and the variety of the productions, and that this might be made one of the richest and most advantageous provinces of the Russian empire. Notwithstanding this, the country has very undeservedly, and in a manner not easily to be comprehended, acquired so bad a character, that with the name of Kamschatka is associated, almost universally, the idea of one of the coldest, most desert, most inhospitable spots upon the globe.

I presume that this arises very much from the idea, that, as Siberia is a very cold country, and Kamschatka is still farther removed from Europe, it must consequently be much colder; but the idea is taken up without reflecting at all upon its geographical situation, which is much more to the south than Siberia, or without paying any attention to the descriptions given by those who have visited the spot. I may perhaps be

told that circumstances made me consider Kamschatka in a more than usually favourable point of view; or it may be supposed that the winter I spent there was uncommonly mild, and I did not therefore feel the horrors of the place in their fullest extent; but I must observe, in answer, that my testimony does in reality not differ essentially from that of many other persons whose knowledge and impartiality render them highly deserving of credit.

Krascheninnikoff and Steller stand at the head of all the travellers who come under this description. Besides them, in Captain Cook's third voyage, and in the voyages and travels of La Perouse, Lesseps, Pallas, Sarytscheff, Sauer, Zimmermann, Krusenstern*, and others, very interesting remarks are to be found upon the situation, temperature, productions, &c. of this country. The result of their observations is, that the climate is by no means so terrible as it is generally supposed to be, that the land is capable of a high degree of cultivation, and that the productions of nature are both various and abundant.

The following are testimonies taken from one or other of these writers, given in their own words. "As to the cold, it is never exceedingly severe, even at Bolcheretsk and Awatscha, though these are the coldest parts of Kamschatka. In Lower Kams-

* The works here referred to are for the most part German ones, some of which are not translated into English. The works of Steller, of Pallas, and of Sauer, are among those from which Mr. Coxe principally drew the information many years ago, communicated by him to the English reader, under the title of *An Account of the Russian Discoveries between Asia and America, &c.*

chatka Ostrog*, it is much warmer than in many parts of Siberia, under the same latitude. The winter is moderate but constant, the frosts are not so severe, but the thaws are less frequent than about Jakutsk in Siberia, though sometimes thaws do come on in December. The thermometer stands commonly between the third and fifteenth degrees of Reaumur. In a very extraordinary frost it has been known as high as twenty-seven. In January, which is the coldest month, it fluctuates ordinarily from ten to twenty-two. At other times of the year the warmth is generally from two to ten. The greatest heat ever known was twenty-one, and this was felt in two succeeding years†."

"After the arrival of the expedition under Billings in the harbour of St. Peter and St. Paul, the weather was very fine, and continued so till the twenty-sixth of November, when the winter began to set in, and Reaumur's thermometer was commonly from two to four. The frosts were for the most part during the winter from five to eight, and in the severest time generally between eighteen and twenty-one; never beyond the latter. The climate in the interior of the peninsula is much milder than upon the coasts. Along the River Kamschatka there is a valley towards a hundred and eighty English miles long, sheltered from the sea-winds by chains of hills to the east and the west: here vegetation is much forwarder, and begins by the month of March‡."

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* Ostrog is a Russian word, meaning a fortress surrounded with a palisade.

† Krascheninnikoff and Steller.

‡ Travels to the northern parts of Russian Asia and America, from the year 1785 to 1794, by Martin Sauer, published at Weimar in 1803, mentioned in the Introductory Chapter to the present volume.

Since from the situation of this peninsula, which stretches from the fifty-first to the sixty-first degree of northern latitude, the cold may reasonably be supposed far from insupportably severe, and since the testimonies of persons acquainted with it concur in asserting that it really is not so, it seems as if the soil, which is very good, should be extremely proper for agriculture and the breeding of cattle. As a proof that it is so, I will bring forward the testimonies of others rather than my own.

"There can be no doubt but that in the country about Werchnoi Ostrog and Kosirefsky, both winter and summer, productions may be raised as good as in any other country under the same degree of latitude. By a judicious choice of the places for growing corn, it is certain that a sufficient quantity might be raised not only to supply the inhabitants amply, but also for the supply of Ochotsk and other places; and though the land is not everywhere capable of cultivation, there are districts sufficient that are perfectly so to answer all the above purposes*."

In the third voyage of Captain Cook, page 354, we find the following passage, speaking of Kamschatka. "The soil seems exceedingly well adapted to agriculture, and to the cultivation of all sorts of common garden vegetables, although to my great astonishment I did not see any where the smallest spot made use of for either of these purposes." In later times, particularly under Reineken, successor to the worthy Major Behm,

* Krascheninnikoff and Steller.

people have, at length, been convinced that Kamschatka is fully capable of cultivation.

"Agriculture," says Pallas in his Northern Essays, "is, by a judicious choice of place, at present as promising in Kamschatka as in the northern parts of Europe. Barley and summer-rye yield abundantly, and the villages of Klutsheffskaia and Milkowoi, which have taken to agriculture, are now the most flourishing places in the whole country."

Baron Steinheil, the successor of Reineken, who also lived many years in Kamschatka, says, in a plan which he laid before the government for the improvement of the country, "From a long course of observations made during my residence in Kamschatka, I am convinced that both the climate and soil are such as that agriculture might be carried on with the most complete success."

Sauer, who passed the winter of 1790 and 1791 here, says:---"The garden of the Cossacks was well stored with cabbages and various sorts of pulse: the sight of it charmed me more than any thing I had yet seen. We had abundance of fish and wild birds, with potatoes, carrots, turnips and cabbages, and a variety of very well flavoured roots, that grow wild, with many different sorts of roots and berries: we also brewed spruce-beer." Again: "Twelve versts from Werchnoi Kamschatka, is a village called Milkowoi, inhabited by Siberian peasants. They have gardens which produce very fine cabbages, potatoes, turnips, carrots, cucumbers, and other vegetables; they also cultivate, for their own use, rye and Saracen corn, or buckwheat,

which yield extremely well. There is no doubt therefore, that, with proper attention, wheat might also be cultivated, and that the peninsula might be made to produce corn enough not only to supply itself, but the neighbouring countries."

That breeding cattle might be brought to great perfection in Kamschatka there can be no doubt, since Krascheninnikoff and Steller assure us, "that the grass grows so high, and is so full of sap, that the like of it is scarcely to be seen in any other part of the Russian dominions."---And again we are told by La Perouse, that "in the natural meadows the grass was above four feet high, and a great quantity of hay might very well be made for the winter: in some places it grows so rapidly that it would even bear to be mowed three times in the summer. Besides, the cattle would, in many places, find fresh food the whole winter through."

To these different testimonies, which speak sufficiently for the climate of Kamschatka, I will add such observations as I was enabled to make during my own stay there. The first snow fell on the twenty-eighth of September, old stile, the tenth of October, new; till that time the weather was almost constantly mild and fine. The winter of 1806 and 1807, which I passed here, I was assured was more severe than usual, as Awatscha Bay was nearly frozen over, which is seldom the case. The thermometer was never below twenty-two degrees by Reaumur.

In the month of March, between the twelfth and twenty-third, I took a journey from Tigil to Bolcheretsk, when I found the snow in many parts entirely melted, and the rivers free from

ice. The snow was still deep about the harbour of St. Peter and St. Paul. In the beginning of April I went to Werchnoi Kamschatka, at which time all the rivers and streams were perfectly free, and the snow almost every where entirely melted. At my return to St. Peter and St. Paul, on the twenty-second of April, every thing was green, and the spring herbs shooting: the wild garlick, in particular, was already some heighth above ground: this is collected for the people who are ill with the scurvy. By the end of April the cows were feeding on the new grass. The nights were generally cold, but in the day the benign influence of the sun's rays was strongly felt.

The climate of Kamschatka, according to my experience, appears very much the same as in the European nations that lie under correspondent latitudes, and the inhabitants of this peninsula I have no doubt, under a better order of things, would be richly supplied, by the productions of the land, with every thing requisite to the support of life in comfort and affluence. The zeal and activity shewn by his excellency Von Pestel, the present Governor of Siberia, for improving the situation of this country, give hopes of the happiest consequences; and how grateful must it be to a benevolent heart to be considered as the benefactor and author of happiness to a whole nation.

As to what concerns the present political situation and institutions of Kamschatka, such ample information is given by Captain Von Krusenstern in the second part of his voyage, that I can scarcely add any thing to it; and I will therefore rather confine myself to what concerns the natural history of the country and its productions. Happy shall I be if, in so doing, I may call the attention of those to whom it is a point of real

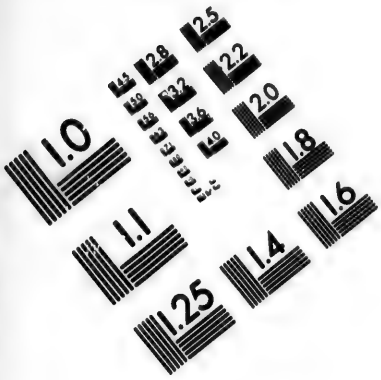
importance, towards a region, at present, too little known and too much neglected.

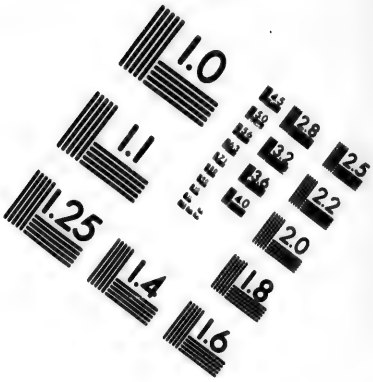
Quadrupeds, birds, fish, fruits, or rather berries, of various sorts, with many kinds of wholesome plants and roots, and forest trees of a pretty considerable size, are produced in the greatest abundance in Kamschatka. The following are among the most important species of each class.

Bears. The *ursus arctos* thrives here exceedingly. The skins are commonly used for covering sledges, or for spreading over the beds, seldom for cloathing. When stripped of the hair the leather is used very much for the soles of boots, as it keeps the feet very warm, and is less liable to be frozen than any other leather. The flesh is considered as a great dainty, and the fat is used in cookery instead of oil; the latter is also used for lighting the houses. The intestines, when well cleaned, dried, and sewed together, are stretched over frames and used instead of glass for the windows. These animals live chiefly upon fish.

Wild Sheep. The *ovis ammon* is found principally upon the highest parts of the eastern and western chains of mountains. The skins furnish excellent warm cloathing to the Kamschadales, and the flesh is particularly good eating. A great number of them are killed in the autumn for winter stores.

Rein-deer, *cervus caribou*. These animals are found in great numbers, both wild and tame. The comparative riches of the Coraks, whose country joins to Kamschatka, consists in the greater or less number of rein-deer possessed by them; they





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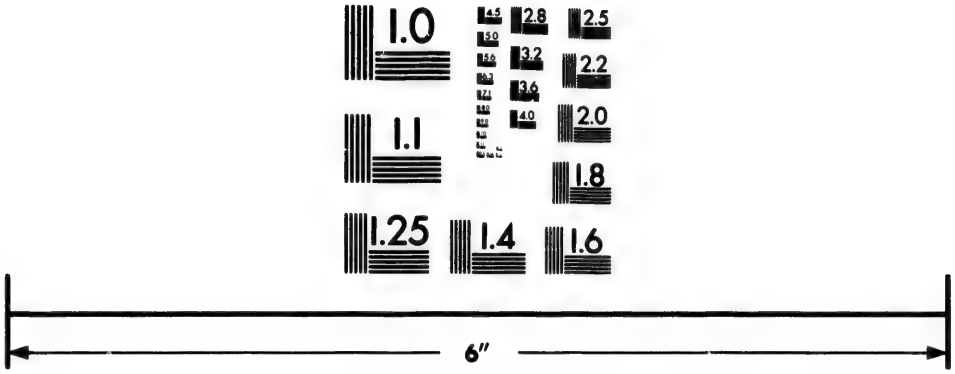

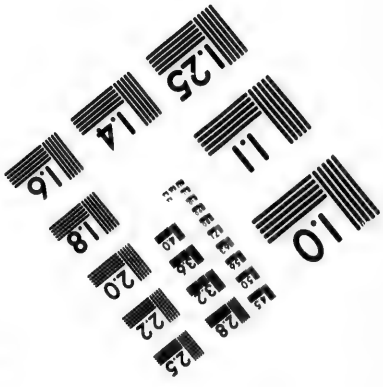

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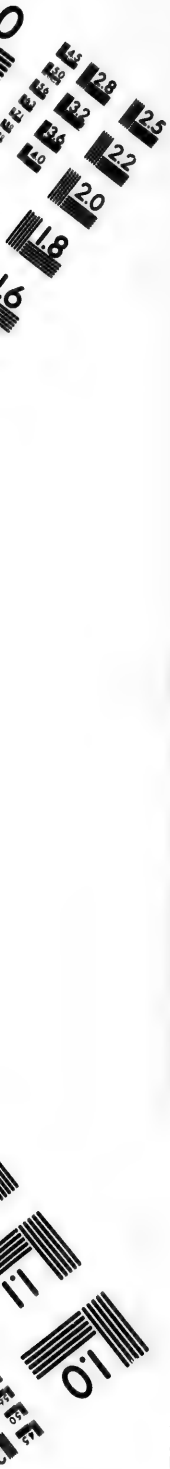
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administer to all their most essential wants, furnishing them food, clothing, and in some sort habitations. Formerly large flocks of tame rein-deer were kept in the western and north-western parts of Kamschatka; these were all, however, bought up or stolen, through the cupidity of the Commandant. The present Governor, General Von Koscheleff, convinced of the great importance and utility of these animals, has begun to collect together new flocks of them, and has purchased many, on account of the crown, from the wandering nations upon the borders. By cultivating this branch of political economy with diligence and attention, in a very few years the entire peninsula might have an ample supply of excellent and wholesome meat the whole year round: this would contribute very essentially towards keeping the inhabitants in good health. The accomplishment of so important an object would be the more easy, as the Coraks every year drive large herds of their rein-deer into the country for the purpose of selling them either alive or dead to the Kamchadales.

Although there are abundance of hares, *lepus lagopus*, marmots, *arctomys bobac*, and ermines, *mustela erminea*, both the flesh and skins are held in little estimation, and it is thought scarcely worth while to catch them. In the year 1805, General Koscheleff was presented by a Kamschadale, as a very great curiosity, with the skin of an ermine entirely black. Black, red, and stone foxes, *canis lycaon*, *canis vulpes*, and *canis lagopus*, though they abound, are little valued, and are therefore scarcely to be brought into question. The skin of the wolf, on the contrary, *canis lupus*, is much more valued, and brought in abundance to Ochotsk as an article of trade. These creatures some-

times rove about in large flocks, when they are very formidable, and do a great deal of mischief.

SABLES, *mustela zibellina*. The skins of these animals are considered as the most costly of all furs. The hair of those taken in Kamschatka is extremely thick, but the fur must yield to that of the sables taken about the River Lena in Siberia, both as to its darkness and glossiness. In former times the quantity of sables taken was so great, that in one year only skins to the value of eighty thousand roubles were brought to Ochotsk. At present the Kamschadales are so oppressed with the tributes exacted by the government, that they scarcely get more than sufficient to make up the number required: in the last year the value of the sables taken did not amount to more than between three and four thousand roubles. Now and then, but very rarely, white sables have been taken.

THE GLUTTON, *ursus gulo*, is rare, and the skin is of great value; it is chiefly used for bordering dresses of other kinds of fur.

Phoca jubatis, *Phoca vitulina*, and other kinds of seals, are among the very abundant productions of these parts. They are sometimes killed in order to be taken, sometimes taken alive in nets, and are of very great utility. The skins are used to cut into straps for making the harness used to the sledges; they are also used for soles to boots and shoes: the fat and oil are used both for eating, and for lighting the houses; the flesh, though black, and not well flavoured, is also sometimes eaten. The entrails of some of the species are used in the same manner as those of the bears, instead of glass for the windows.

SEA-OTTERS, *lutra marinæ*, are now rare; the skins, which are so highly prized in other countries, are furnished chiefly by America and the Aleutian islands. The fish-otter, *lutra vulgaris*, is found in abundance about the lakes, and the skin is much used as trimming for winter dresses.

WHALES of several sorts abound, but the Kamschadales do not go out in pursuit of them; they only use the fat and oil of those that are thrown on shore by the waves. Great numbers come in the herring season into the harbour of St. Peter and St. Paul; and if the Kamschadales would only give themselves a little trouble in endeavouring to catch them, they might be made a rich source of gain.

As domestic animals, horned cattle, horses, rein-deer, and dogs must be particularly mentioned. Within a few years some villages have taken to the cultivation of horned cattle; and in Milkowoi, Klutscheffskaia, Malka, and other places, may be seen herds to the amount of seventy or eighty head. In some of the parts about the Kamschatka River, particularly in the village of Kosirefsky, I have seen cows in the middle of winter feeding in the open field. By a little prudent attention, cattle would in a short time become very cheap in Kamschatka, and there would be the greatest plenty of milk, butter, and cheese.

Horses are only in use in particular parts of the peninsula. The deep snow in many places during the winter season, and the difficulty of making hay, are obstacles against the use of horses, so that dogs, which feed upon fish, are more employed as draught animals. The latter are indeed the most useful of all

domestic creatures, and are of such importance, that I mean to speak of them more fully in the next chapter. In summer, when the communication between one place and another is carried on chiefly by water, the villages almost all lying upon the banks of the rivers, the dogs are no longer of any use, so that they rest entirely during that season. Horses are then used in some degree, but only to go between places which are separated by mountains, and do not permit of water communication.

The quantity of excellent fish to be had in this peninsula is almost incredible. The common class among the Kamschadales scarcely know any other kind of food. They are eaten fresh and salted, boiled and roasted, raw and frozen, dried and smoked. Bears and dogs, wolves and foxes, river-otters and sea-dogs, water-fowl, and birds of prey of various sorts, all feed upon fish.

When the salmon come up in spring into the rivers, to spawn, the shoals are often so prodigious as absolutely to swell the waters and obstruct their course. They are sometimes caught with hooks, and sometimes with nets; the latter are often torn with the weight of fish taken. The most common way, however, of catching fish, is by making a sort of dam with chests or baskets, in which the fish are enclosed. I myself saw from ten to twelve thousand salmon taken in this way in one night. Smaller fish, such as herrings, sticklebacks, and the like, are caught with flat nets, or with round hooped nets. There are many different species of salmon, the principal of which are known here by the names of *tschawitscha*, *kunscha*, *mikischa*, *crasnariba*, *korbussa*, *kisutch*, *golzi*, *galtschik*, *korucha*, and *chaika*.

There are a number of other sorts of fish, which are no less abundant at certain times of the year, particularly herrings and cod; some species, which are not known to us in Europe, can only be enumerated under the names by which they are here distinguished; as *wachna, ramscha, kambala, uiki,* &c.

It is lamentable, and no less inexcusable in the improvident Commandants of St. Peter and St. Paul, that both the inhabitants and their dogs are often in the winter nearly destitute of food, when heaven has sent such a resource to the country as the fisheries, particularly the herring fishery might be made. These fish come as it were even to their doors; the harbour of St. Peter and St. Paul itself being in the season full of them, the quantities that might then be taken is inconceivable. The same may be said with regard to the cod. In Awatscha Bay, and all along the western coast of the peninsula, they come in such shoals, that I have myself caught more than thirty in an hour with angling; and it requires all the profound ignorance of the officers at Kamschatka, and their soldiers, not to apply themselves to the catching and curing them: this might be rendered as efficient and profitable a branch of trade here as it is found on the coast of Labrador, at Newfoundland, at Iceland, and on the northern coasts of Great Britain. Seventy years ago, the excellent Steller wished to turn the attention of his countrymen to this subject, but it remains in just the same state as at that time.

The quantity of sea-birds good to eat is no less astonishing. The sea-parrots, *alca cirrhata,* and *alca arctica,* come in such enormous flights to the coast in spring, at the breeding time,

that they may be taken by the hand out of the holes in the rocks where they sit, and might be salted for winter stores. The eggs of many sorts of *alca, larus, colymbus,* and others, are scattered about in such myriads, that whole boats full of them might be collected, and preserved in train-oil for the winter, as at the islands of St. George and St. Paul.

Upon the greater part of the rivers in Kamschatka, such numbers of wild-geese and ducks come in spring and autumn, that thousands might easily be taken with nets. They are, notwithstanding, things very rarely seen at the table of a Kamschadale;---for why?---they have neither nets, powder*, or time to go in pursuit of them. The young wild-ducks upon Awatscha River are caught in considerable numbers by spiking them with a sort of wooden three-pronged fork; they might be taken by thousands with nets. Very little tame poultry is to be seen, and indeed they can scarcely be kept on account of the dogs, who devour whatever they can find.

The following are among the principal kinds of birds which I observed here.

Anas Segetum.	*Colymbus septentrionalis.*
Anas Clangula.	*Colymbus Troile.*
Anas glacialis.	*Mergus.*
Anas Boschas.	*Pelecanus Graculus.*
Anas Acuta.	*Pelecanus Urile.*
Anas Crecca.	*Tetrao Lagopus.*

* The want of powder has of late been somewhat remedied, owing to the urgent representations made upon the subject by the Governor-general of Siberia, M. Von Pestel.

Alca arctica.	*Tetrao Tetriæ.*
Alca cirrhatà.	*Tetrao Urogallus.*

Several sorts of *Larus* are likewise to be seen with a number of marsh-birds, singing birds, and birds of prey, the natural history of which deserves to be more accurately known.

The vegetable kingdom is not at all behind-hand with the animal. In the forests, on the hills, and in the vallies, the most excellent berries are to be found in such very great abundance, that they might be collected in large casks full, and preserved for the winter in vinegar or brandy, if the Kamschadales had a little less apathy, and a little more forethought. They, however, think only of the present, and never concern themselves about the future; they have, therefore, at one time of the year a great many more berries than they can consume, at another they have none at all. The number and goodness of the berries compensates in great measure the total want of fruit-trees and garden fruits; but these might also be had, if the same care and attention were paid to raising them, and habituating them by degrees to a new soil and climate, that is paid in European gardens and orchards. The following are the principal berries that are to be found growing wild.

Rubus chamæmorus . . . . . the clowdberry.
Vaccinium vitis idæa . . . . . the red bilberry.
Vaccinium oxycoccos . . . . . the cranberry.
Vaccinium uliginosum . . . . . the marsh bilberry.
Berberis vulgaris . . . . . the barberry.
Ribes rubrum. . . . . the red currant.

Empetrum nigrum . . . . . the crow-berry.
Prunus Padus . . . . . the bird-cherry.
Sorbus aucuparia . . . . . the service.
Arbutus uva ursi . . . . . the trailing arbutus.
Rubus arcticus. . . . . the blackberry.
Lonicera cœrulea . . . . . the honeysuckle.

Nor is there any deficiency of wholesome roots in Kamschatka; the saranna, wild garlick, carrots, and others, afford very excellent nourishment. Turnips and radishes also thrive extremely well, are of an extremely good flavour, and grow to an amazing size. Horseradish is a plant wholly unknown. Potatoes, which thrive here as well as in any part of Europe, might, if the cultivation of them were sufficiently promoted, supply in some sort the place of bread; and these, with the fish, berries, flesh of rein-deer, bears, sea-dogs, wild-sheep, wild-ducks and geese, sea-birds, eggs,&c. would furnish food of an excellent quality, and in great abundance, for a numerous population.

Added to this abundant supply of food, the vast forests of Kamschatka offer an almost inexhaustible provision of wood both for building and firing. In some parts, particularly in Tolbatsch and Tschabina, I have been astonished to see the size to which the larches grow; some of the trunks reach to the heighth of eighty or a hundred feet, and the texture of the wood is even closer and harder than of the trees about Ochotsk, which are used in ship-building. At different times, ships have been built both in the Kamschatka River, and at Bolcheretsk, which have been found to last extremely well. The *Black Eagle*, built here in the winter of 1790, by Captain Hall, for

Billing's expedition, was still in exceeding good condition in 1806, when she was stranded in the Bay of Jamsk.

The following are the sorts of wood most common in Kamschatka.

Birch of various sorts, *betula-alba, betula-nara,* and others. This is the most common sort of tree all over the peninsula. It is used by the inhabitants for a variety of purposes, particularly in making their sledges, and for firing. Of the bark of this tree, here, as well as in many other parts of Russia, vessels of various kinds are made. The sap is not at all used.

Larch Trees, *pinus larix.* This wood is extremely useful in building houses and for ship-building.

Poplars, *populus alba.* These are principally used for making the canoes, which are hollowed out of the trunk of a single tree.

Firs, *pinus abies.* These are only found in some parts of the peninsula, particularly between Tigil and Nischney Kamschatka.

The Cedar Pine, *pinus zembla,* is found in almost every part of the country. Although the English navigators, Captains King and Gore, during their stay at Kamschatka, brewed excellent spruce beer from this tree, this was not sufficient to impress the inhabitants with a feeling of the advantages that might be derived from following the example. The fruit of the tree is small, and it is only gathered and eaten as a regale.

The PLATANUS ORIENTALIS, *oriental plane*, is not, to the best of my knowledge, used for any purpose whatever. The bark of the alder, *betula alnus*, is used in curing the skins of the reindeer and other animals. Willows, *salix arenaria* and *salix pentandra*, are only used as fire-wood.

JUNIPER, *juniperus communis*, and several other shrubs, as the *cratægus oxycantha*, or white-thorn; *rosa canina*, or dog-rose; *rosa spinosissima*, or Scotch rose; and *lonicera cærulea*, or honeysuckle, grow in profusion.

Nor must I omit the advantages which might be derived from the mineral kingdom. It would be no small one if pottery of all kinds were made upon the spot; and it is certain that there is in the neighbourhood of St. Peter and St. Paul, particularly about the village of Daria Buchta, and the hot springs of Paratunka, very good, in the latter place very fine white argile for pottery. There cannot be any doubt, therefore, but that a manufactory of this kind would succeed, under the care of persons of knowledge and industry. But such is the total ignorance of the art of working up and burning clay for similar purposes that prevails in Kamschatka, and such has been the negligence of the Commandants, that, when I was there, notwithstanding the abundance of excellent argile in the country, they had no idea even of burning bricks to build stoves.

Salt, which might, and ought to be procured from the sea that washes the coasts of the peninsula, is generally so scarce, that a pood will sell for ten or twelve roubles. How great would be the advantage of establishing salt manufactories.

The numerous volcanoes yield solid sulphur in great abundance, which might be converted into a profitable article of exportation. The west side of Itscha furnishes excellent sandstone, and in the neighbourhood of Tigil many traces of iron mines are to be seen. Yet, however rich the country may be in metals, while the population is so exceedingly circumscribed, it would not be prudent to attempt working the mines.

From all that has been advanced, the just conclusion to be drawn is, that Kamschatka is a country perfectly capable of being cultivated, and that the climate is not near so frightful as it is generally conceived to be. I am, on the contrary, very much inclined to hazard the opinion that few provinces of the Russian Empire have within themselves such abundant means of being richly supplied with the necessaries of life; nay, that the Kamschadales, from the variety and plenty of natural productions with which their country abounds, might, by the exertion of a little attention and industry, live easier lives in the enjoyment of greater plenty, than many European nations with much milder climates.

Through the new regulations recently made by our most gracious monarch, and the appointment of a committee, which is to occupy itself in examining into the existing abuses, and the best mode of improving the situation of the country, very important steps are taken towards the introduction of a better order of things; and it is to be hoped that in time the wants and hardships under which the peninsula has suffered may be alleviated, and a good foundation laid for attaining future prosperity by means of industry and commerce.

CHAPTER XIV.

The Kamschadale Dogs, considered as draught Animals.—The species of Dogs used for the Purpose.—Their mode of Life.—Castration.—Docking.—Mode of Treatment in their Infancy.—Names.—Food.—The Post Stations.—Number required for a Sledge.—Their Swiftness.—The Leader.—Their Price.—Preference above Horses.—Their Diseases.—The Harness.—The Sledges.—The Ostoll.—The Snow-shoes.—The Ice-shoes.—The Posluki.—The Journeys in Sledges.

THE great and manifold uses of dogs to Europeans is well known: to the hunters they are indispensable companions; by the shepherds are the flock entrusted to their care; and to the housekeeper and traveller they are a source of security. Their value to the South Sea islanders is of a different kind: there they are, in conjunction with the swine, the only sorts of flesh eaten by them. To the inhabitants all along the shores of the Icy Sea, through all Siberia, in Kamschatka, among the Kurile Islands, quite to the northernmost possessions of Japan, in a distance of more than a hundred degrees of longitude, among the Ostiaks, the Samoiedes, a great part of the Tungusians, the Coraks, the Tschutski *, the Kurikans, the Ainus of Jesso

* Some tribes of the Tschutski make use of rein-deer more than of dogs. Those who use the former are called the wandering tribes, those who employ the latter the stationary nes.

and Tschoka, dogs are of still greater importance as draught animals.

As the Kamschadales train their dogs with greater care and attention than any other nation, and since no one can hear the peninsula of Kamschatka named without the association of their post dogs immediately presenting itself to the mind; since, moreover, according to the best of my knowledge, except from the little information given us by Steller and Krascheninnikof, we know nothing of the manner in which they are trained and kept, and that my interest was extremely excited by the subject during the winter I passed there, so that I collected all the particulars I could possibly acquire relative to these animals:---from these various considerations I have thought it might not be unacceptable to my readers that an entire chapter should be devoted to them.

The Kamschadale dogs have a long sharp snout, erect pointed ears, and a long tail with very thick hair. In their form, figure, size, and whole external appearance, they resemble the wolf very strongly: the European dogs which they most resemble are the shepherd's dogs, as they are called, with pointed noses. The hair of some is strait and short, of others long and soft; a few have the skin covered with a positive wool, which, if properly washed and prepared, may be spun like the wool of sheep. The dogs which have this wool, or the long and fine hair, are called magnates, or hairy, and their skins are exceedingly sought after for making warm winter garments, or for trimming the clothes. These kind of dogs are not very good for travelling; they can indeed scarcely be used in fresh fallen snow, or if the snow be very deep, since in either case it often hangs

about the fine hair, and gets entangled with it, where it freezes, and impedes the animal's running very essentially. The tall-legged and thinly haired dogs are the best for drawing a light sledge. Some few of the dogs bark like ours, but the greater part never bark, only howl. Their colours vary exceedingly; they are black, white, grey, red, and almost all spotted in a great variety of ways.

They live, the whole year through, out in the open air, never in any kind of house or stable. In summer they scrape themselves holes in the earth, in which they lie down to be somewhat cooler, and in winter they bury themselves in snow in the same way, as a shelter from the cold. I have often myself, in very stormy weather, seen them bury themselves thus, and lie there with the snow falling upon them over and over again, without attempting to stir, and when wanted, they come out from under a considerable depth of snow. They can bear any degree of cold much better than heat: in the spring, when the weather grows warm, they pant as if they had come off a long journey.

When the young dogs are some weeks old, and can live without the mother's milk, their training is begun. The first step is to fasten them to a stake by a little stick, or a chain fixed to a collar round their neck: this at once prevents their getting a habit of gnawing the leather, of which the harness they are to wear in future is made, and gives them a habit of keeping still and quiet.

In their youth they are fed with a soup made of fish, of which they are allowed to eat as often and as much as they please, so

that they sometimes fill themselves to such a degree that they can scarcely stir, and their belly seems ready to burst. This soup should be given them milkwarm, never hot. Thus fed, they grow very strong and large, and those that eat heartily are always expected to turn out strong and useful dogs. The largest boned animals, with a high and broad foot, long pointed and erect ears, a widely opening mouth, extremely peaked at the end, and thick made at the back of the head and breast, are always considered as the best built for work.

All dogs designed for the harness undergo castration when they are about five, or between five and six months old. This operation is performed under the idea, that by it they are, like our horses, rendered capable of bearing greater fatigue, and are less liable to be disturbed by their passions and inclinations. Summer is the best time for performing the operation, as in the autumn or winter the wound does not heal near so fast. The dogs that remain uncastrated for breeding, and the bitches, are never used for the draught except in cases of great necessity. The castrated dogs always bear the others a most determined enmity, and will bite them severely whenever they have an opportunity.

A second operation, which the draught dogs must undergo, is to have their tails docked. As in their natural state the tail is very long and the hair very thick, it would be a great incumbrance to them in running. Like the English horses, therefore, there are few Kamschadale dogs to be seen that are not docked. This operation is not performed till the dog is considered as having arrived at his full growth, and that is not till it is between two and three years old: it is

supposed that performing it sooner would impede the animal's growth.

It is remarkable, that by a constant repetition of this operation, nature is so put out of her proper course as that sometimes dogs will even be born without tails: an instance of the kind I saw myself in Malka, a considerable village in the interior of Kamschatka. In the same manner I have known in England, particularly among the breed of large heavy cart-horses, instances of colts coming into the world without this usual appendage *.

As long as the dogs are growing, they should not be put into harness, otherwise there is danger of their never attaining their full strength. This rule was formerly observed very rigidly, but in latter years the Kamschadales, for want of time to lay up a proper supply of winter-stores, and from the services they are obliged to perform for the crown, have lost so many of their draught dogs, that they have been obliged to use the young ones even at only seven or eight months old, by which means

* What would the author say then to a kitten born without a tail? Such an instance has fallen under the Translator's observation. This could not be ascribed to the same cause, since, though the English dock their horses, they do not dock their cats. Indeed it seems a totally vain research to endeavour to account for such eccentricities of nature. We should never think of ascribing the misfortune of a child's being born without arms, instances of which have been known, to the necessity which has not unfrequently occurred of people having an arm taken off; and it is probable, that the few instances which might be cited of Kamschadale dogs or English horses being born without tails, would have occurred equally even though the practice of docking had never prevailed in either country. Besides, it appears, from the author's own account, that it is only the draught dogs, not the breeding dogs that are docked.—TRANSLATOR.

the number and goodness of them is so much diminished, that, instead of three or four, which formerly were quite sufficient to draw a light load, five or six are now required.

The Kamschadales of the present day look back with deep regret to the time when their forefathers could bestow the utmost care and attention upon training their dogs. They were then confined in pits made in the earth, and daily fed by the same person. After they had undergone castration, and were recovered from it, they were brought out from time to time, and harnessed with old and experienced dogs, that they might learn to draw, and then carried back to the pit, where they were constantly confined till they were thoroughly broke into the harness. The dogs that were thus trained became fearful of the light, and of mankind; at the least noise, even the rustling of a bird in its flight, they were alarmed, and then drew with their utmost strength. Three trained in this way, and not brought into use till they had attained their full strength, would do as much work as six in the present day. Young dogs, who are naturally more eager than old, are very apt to exert themselves too much, for which reason the Kamschadales do not willingly employ them in long journeys, but rather keep them to travelling short distances and with light loads. Dogs of five or six years old are the best for going long journeys and drawing heavy loads.

Every dog has a name given him when he is young, which is commonly taken from his colour, or some peculiar property about him; for instance, short-ear, long-ear, hanging-ear,

sharp-nose, red-spot, black-head, white-foot, short-tail, &c. &c. This custom has its particular use; for when a number of dogs are harnessed together, and any one does not do his duty, the driver calls to him by his name with a menacing voice, which is sufficient to urge him on. Such a distinction is the more necessary, as the whole *attelage* is managed entirely by words, never by the whip or guiding reins.

The dogs are fed principally upon fish, which is given them under all possible forms; raw or cooked, fresh, frozen, dried, or putrid. Yet a great deal of attention to their feed is necessary, and every Kamschadale, who is a good œconomist, and would have his dogs in good order, always makes this one of his great objects in training them. In summer they are generally left to rove at large, and find their own food, when they keep on the sea-shore, or in the neighbourhood of rivers lurking after fish, standing in the water up to their bellies: when they see a fish they snap at it with such a certain aim, that they very rarely miss it: in doing this their whole head is frequently under the water. When they can get a superabundance of food, as for instance, at the time when the salmon come up the rivers in shoals, they eat the heads only, as being the finest flavoured part of the fish, leaving the bodies to become putrid.

In the autumn these animals are compelled, by a want of food, to return back to their owners in the villages and towns: they are then tied up that they may not be out of the way when wanted to be put to the sledges. At this time they are very fat, so that only a small piece of dried or frozen fish is given

them every day, some days even they are not allowed any thing, that they may grow lean by degrees, since a very fat dog is heavy, and never draws well. Day and night they make known their regrets, for the loss of their freedom, by a most lamentable howl; and as every Kamschadale has enough dogs for an *attelage*, that is six at least, and each village contains from fifteen to twenty inhabitants, there are commonly from a hundred and twenty to a hundred and forty or fifty dogs: as soon as one begins to raise his voice, all join in the concert, and make a most horrible noise indeed.

From the excessive abundance of fish in summer, and the want of time to clean and dry them, large pits are dug in the ground, where they are thrown in by thousands, and covered over well with straw, planks, and earth. When one of these pits is opened the whole neighbourhood is filled with the most horrible pestilential effluvia that can be imagined, from the putrid fish, but this smell seems to make no impression whatever upon the olfactory nerves of the inhabitants. These fish, with other kinds of carrion, are the highest dainties that can be given to the dogs, but they are only allowed a small portion now and then. The practice has, however, fallen somewhat into disuse since the intercourse of the Kamschadales with the Russians, and the principal food of the dogs, in winter, is now frozen or dried fish. This latter is called jukola, and is given in larger or smaller portions according to the state of the dog, whether he be much or little in flesh. It was very striking to me, that the part of the fish most prized by them when fresh, the head, was, when dried, wholly rejected. Perhaps this is easily to be accounted for: the bones and teeth of the salmon become ex-

tremely hard and sharp when dried, and as the dogs are often half famishing with hunger, so that they fall with great eagerness upon their food, they commonly pay for their dinner with a bloody mouth. As long as the rivers are frozen and the dogs cannot get at water, they will quench their thirst by eating snow or ice.

A horse if he is expected to work well must be well fed. The very reverse is the case with the dogs: they cannot run with full stomachs; and if any one, from well-intentioned ignorance, feeds them well, and puts them directly to their work, they will knock up by the way; diarrhœa will come on, and they will lose their strength entirely. They always set out therefore with empty stomachs, and are only fed in the evening when the duty of the day is performed. If any thing is given them in the morning, it is about half a dried fish, and upon this slender portion of food they will run sixty or eighty, nay, even a hundred versts in a day.

When arrived at the place of their destination, they are not fed till somewhat cooled: after a journey of thirty or forty versts, they should rest an hour, after one of seventy or eighty versts, at least two hours, before they are permitted to eat. A moderate meal is then given them, and they are left to rest all night, by which they are enabled to pursue their journey again the next day. The journeys in the first days should be shorter than in the latter ones; and if the same dogs have gone forty or fifty versts for five or six days together, a day's rest ought to be allowed them; they should then be well fed before they are required to finish their task.

From perverseness, for want of having been well trained, so that they have acquired bad habits, or sometimes from hunger, they will gnaw the leather straps with which they are harnessed. Such a circumstance may reduce a traveller to a very awkward dilemma, and for want of harness he may be obliged to go the rest of the way on foot. A dog, however, who has been properly trained, would not even, when enduring the severest hunger, dare to gnaw his harness.

A propensity to thieving seems a quality innate in the Kamschadale dogs: they will steal any thing that comes in their way, nor can they be broke of it even by the severest correction. In this, as well as in their exterior appearance, they seem very much to follow the nature of the wolf and the fox. When I was among the Coraks, my dogs got loose in the night, and gnawing a hole in my host's leather bag of train-oil, licked up the whole contents: this occasioned them the next day a very severe diarrhœa.

Stinking carrion is the most acceptable food they can have; and they will often contend strongly for human excrement. If, as sometimes happens, the supply of dried fish begins to fail towards spring, the dogs are then fed with the lard of bears or sea-dogs, but no more is given them than is absolutely necessary to support life, till the fresh fish come again into the rivers. If they are allowed to eat much flesh, they grow heavy and unable to work.

When pressed with hunger in the spring, while there is yet a deficiency of fish, and their time of service in the sledge-work

being over, they are turned loose, they will sometimes unite together in a body to attack a bull or cow, which they tear to pieces and eat. I have even been assured, that, in such cases, they will fall upon each other, and the young weak dogs become the prey of the older and stronger. From this circumstance it would be almost impossible to keep sheep or hogs at Kamschatka, unless the dogs were shut up in houses and stall-fed.

After the dogs have been fed sparingly the whole winter through, and the fish begin to come up again into the rivers, the Kamschadales do not allow them immediately the full enjoyment of plenty, because, as they say, they must be accustomed to it by degrees; a sudden change in the quantity of food would be very injurious to them; probably they would over-eat themselves, and bring on diarrhœa. Soup is therefore made of fresh fish, and given them awhile before they are turned out.

The usual watchfulness of the canine race is a property in which the Kamschadale dogs are wholly deficient. Their dexterity is confined entirely to drawing; it is with a view to that alone they are trained; it is to that alone they are confined: they seek to shew their fidelity and attachment to those by whom they are fed, and whom they acknowledge as their masters, by exerting their strength to the utmost in their service. Every master, therefore, who wishes to have good dogs, feeds them himself, and stays with them till they have eaten their food: this is the more necessary as every single dog will endeavour, if possible, to steal from the others.

All over Kamschatka are regular post-stations, by which

travellers may, in winter, be furnished with dogs as in Europe with horses. The stations are in general at about thirty or forty versts distance from each other, some are fifty, and a few even as far as seventy. Every traveller has a sledge with six dogs for himself, and is attended by another, in which is a Kamschadale, who carries his luggage, and returns with both sledges to the station whence they were taken. As many sledges are required as there are persons travelling, since every one is usually his own postillion and drives himself. The post-dogs are less manageable with persons they are not accustomed to than with their own regular masters; the Kamschadale attendant therefore, who is commonly the proprietor of the dogs, takes the lead, and the dogs having him constantly before their eyes, go on much more freely and willingly.

If any one visits the chief of a village, or an *amateur* of dogs, and is perchance complimented by him with the use of some of his best draught animals, he will find himself not near so well off as with the worst post-dogs: no sooner do they hear a strange voice, to which their ears are unaccustomed, and not that of their regular master, than they grow negligent, and will scarcely stir, let them be menaced or corrected ever so much. I once bought in a small village a dog which was very highly recommended to me, but who had never been accustomed to any other master than that he then belonged to. When I put him to my sledge with others, and we left the place of his nativity, he was constantly looking back towards it, was very unwilling to go forwards, and notwithstanding pretty severe correction, drew very ill. At the next place where we stopped he would not eat, but was uneasy, restless, and constantly looking back towards the way we had come, howling lamentably. This con-

tinued for several days, when, at length, he seemed to get reconciled to his new service, and shewed himself deserving of the recommendation that had been given him.

The number of dogs harnessed to a sledge depends partly upon the weight they are to draw, partly upon the goodness of the dogs, and partly upon the goodness of the sledge road. A light sledge with only one person, and but little baggage, may be drawn very well, and at a very good pace, by four or five dogs. Six can draw a sledge loaded to the weight of fifteen or sixteen Russian pood, that is between six or seven hundred pounds, for a considerable distance. If the load be greater, more dogs are required to draw it. Young dogs are very much injured by being too early put to drawing great weights; they acquire, by this means, a slow manner of going, and can never after be brought to run with dogs that go a swifter pace.

The common rate of going with post-dogs is about ten or twelve versts an hour, the best dogs will, however, go as far as fifteen, or even twenty. Such a rate cannot be continued for any considerable distance, and only along very good roads; the same dogs can go forty or fifty versts in three hours, or three hours and a half, but they could not go eighty versts in six hours. With very good dogs a man may go two hundred versts in eight-and-forty hours, or even three hundred in three days, but then a day of rest is necessary.

The dogs commonly go a trot, and with such an uniform steady pace, that, if the road be tolerably good, they clear almost regularly the same distance within the hour. With

post-dogs, accustomed to the harness, though they are not usually the fleetest runners, a person who travels day and night may get on very fast. At Tigil, a place on the north-west coast of Kamschatka, I met an officer who had been sent as a courier, and had travelled fifteen hundred versts in nine days and a half, consequently a hundred and fifty versts every twenty-four hours; he had changed dogs at every station. Steller says, that with good weather and good roads a man may travel from a hundred to a hundred and forty versts in fifteen hours.

If the dogs are negligent in drawing, and will not mind the driver's menaces, they are then corrected, generally with rods, very rarely with a stick, as a bone or rib might easily be broken by giving too hard a blow, and the animal would be wholly disabled. They are not driven with a bridle or reins, but are guided entirely by words. On this account a great difference is made between the leader and a common post-dog. By a leader, is to be understood the dog that goes at the head of the *attelage*, and who, if he be a good one, obeys the orders of his driver very exactly: but of this more hereafter.

The worth of a dog in Kamschatka varies as much as that of a horse in Europe. A common draught dog costs from thirty to forty roubles, but an exceeding good leader will sometimes fetch a hundred, or even a hundred and fifty. A young dog but just weaned from the mother, whose worth cannot yet be known, may be had for ten roubles. The best dogs at present to be had are on the western side of the peninsula, on the road from Tigil to Bolcheretsk, the inhabitants here being less

burdened with tributes, and the dogs not kept so constantly in the harness.

In purchasing a dog, many people, well acquainted with the subject, examine the upper part of the thigh, for they say that this is the best test by which to judge whether he works well or not. By eager drawing, the harness lies so close that it rubs the hair very much, and if the hair be not rubbed, there is reason to suspect the dog of being lazy. Others deny that this is any test whereby to judge of the animal's goodness.

A good leader is above all things essential to getting on well, as the rest of the dogs follow him implicitly. It is a real fatigue to have a bad leader, who perhaps goes to the right, and leads all the others after him, when he is ordered to go to the left. If there be no leader, or a bad one, it is necessary to follow a sledge which has a good *attelage*, since the worst dogs will, without difficulty, follow another. If any one be so fortunate as to possess a good leader, he should keep him constantly in practice, for if he be not, he is apt to forget all he had learnt, and his value is diminished exceedingly.

For many reasons dogs are very much to be preferred to horses, as draught animals, in Kamschatka and other northern countries. They can draw the sledges through the deepest snow, through bogs and morasses but slightly frozen, and over rivers and steep hills, where it would be impossible for horses to go. It is moreover much easier to lay up a store of winter provision for the dogs in the immense shoals of fish that may be taken, than it would be to lay up a quantity of hay for

horses. Again, dogs can bear much more continued labour than horses; they will go on perfectly well for three or four days together with only a piece of dried fish, which takes up very little room, and will work with it better than if they were fed more plentifully, while horses would never be able to endure the harness for half the length of time, without an enlarged allowance of food. Dogs, besides, do not require any particular protection from the weather, even in the severest cold of winter, and seek their own food in summer without their masters being at any expense for them. The skin of old worn-out dogs, who are no longer able to work, may be converted into excellent warm clothing; and, lastly, they are not half the trouble in training that horses are.

The draught-dogs must always be kept chained up in winter; their strength would be too much expended by leaving them at large. It is, besides, the only way to keep them ready at hand when wanted for the harness: if they were left at liberty, they have cunning enough to know when they are wanted for their work, and would run away, and hide themselves, nor appear again till driven to it by hunger. A third reason for keeping them chained is, that they are very apt to quarrel, and will sometimes receive a bite, which will disable them from work for a long time. If a dog grows very fat, so as to be unfit for work, he is turned loose awhile, as he becomes thin much sooner by being left to run about.

In the last place, some diseases and casualties to which these dogs, as draught animals, are more particularly liable, must be noticed. A good drawing dog, particularly those that go next to

the sledge, are very liable to have the shoulder-bone dislocated. If, for instance, the roads be very uneven, so that the sledge slips suddenly into a hole, the weight then rests so much upon the harness which goes round the shoulders and breast, that by the force of the stroke, as the animal probably still pushes forwards, the bone is displaced. This is an accident which occurs so commonly, that as soon as it is perceived, the driver sets the bone again immediately, without its being attended with any bad consequences; if, however, it is not perceived and reset at once, the best dog is almost inevitably rendered useless.

In very severe cold, if the dogs get their feet wetted, they are apt to freeze, and perhaps they may be in consequence disabled for the whole winter. As the spring advances, when the snow is sometimes melted in the day-time, and frozen over lightly again at night, so that it will scarcely bear the weight of the sledge and dogs, they are very liable to get their feet wounded by the rough half-broken ice; to avert this, it is common to fasten a sort of leathern stocking over both the fore and hind feet, up to the first joint of the leg; many dogs, however, will not bear the confinement this occasions, and tear the leathers off.

When the sledge road is very hard, and smooth frozen, and the dogs have to draw a heavy laden sledge up a steep hill, they endeavour so much to stick their claws fast into the ice, that they are sometimes torn out by it from the roots; they are by this means rendered incapable of work for a long time. It sometimes happens that the dogs suddenly refuse to eat, and become very thin; the Kamschadales then cut out the ligament

under the tongue, which is commonly called the worm, asserting that this is the occasion of the disease, and that the animal recovers as soon as it is cut away. It may be, perhaps, that the ligament is enlarged. Other casualties to which they are subject are the tape-worm, ruptures, dysenteries, and, according to the assertion of the Kamschadales, almost all the diseases incident to mankind. It is very remarkable, that upon the most earnest and frequent inquiries, I could not find in all Kamschatka any instance of madness having been known among the dogs.

The sledges are of a very simple construction, made of birch-wood and leather, entirely without nails. Some are higher and stronger in their construction, others lower and lighter, according as they are to be used for travelling, for the transport of goods, or only for hunting-parties. Certain rules must be observed in making them, without which they will not be found to answer their purpose. It is worthy of remark, that throughout all Kamschatka they are made of an uniform breadth, and that in good sledge roads a track will be found which exactly suits them, so that every sledge runs along the same line. A good light sledge does not weigh more than twenty or two-and-twenty pounds, and is, notwithstanding, so firm, that it might run with great force against a tree, without any danger of being broke. A sledge for the transport of goods must be made stronger in all its parts, and is consequently much heavier.

The sliders upon which the sledge runs must stand about half an inch wider asunder before than behind: this makes them

run much lighter. The seat rests upon four legs, the two fore ones of which must be half an inch higher than the hind ones. The seat ought not to be raised very high, as that renders it more liable to be overturned. Although they are intended in general to hold only one person, two may in a case of necessity be accommodated conveniently, if they sit sideways as upon a bench, one inclining towards the right, the other towards the left. The driver always sits sideways, that he may be ready to spring out at any moment, and hold the sledge up, if it be inclined to fall, and springs in again as he runs by the side. The great art of the driver is to balance himself properly, so as to have the sledge always in his power, and to keep it in equilibrium.

Besides the sledges in common use, there is another sort, which are called nardens, and are used only for the transport of goods. These resemble a sort of long bench, with a guard on each side set upon short feet. The sliders are the same width asunder as those of a common sledge.

The most necessary implement belonging to a sledge is the ostoll, as it is called. This is a strong stick formed into a blunted angle, like the knee when bent, which has at the lower end an iron spike, and at the upper, little thongs of leather platted together, mixed with rings or shells that rattle. This stick supplies the place both of a whip and reins. If the driver wants to make the dogs go faster, he rattles the ostoll, if he wants to make them go slower, or if he would stop the sledge, he sticks the iron spike before it into the snow or ice, and thus keeps it back, and checks the dogs. In the same manner he

must hold up the sledge when it descends a steep hill, since otherwise, particularly if it be heavy laden, it runs faster than the dogs, and going over them reaches the bottom of the hill first, dragging them after it. The driver is commonly in such a case thrown out, and must follow it on foot till it is stopped by arriving at the bottom.

The ostoll is also used to give the word of command. It has been hinted before, that the dogs are directed by certain sounds whether they are to go fast or slow, backwards or forwards, to the right or to the left. If the driver would have them turn to the right, he calls *kachtach*, if to the left, *huchahucha*; if he would have them go fast, he says *ha*, if slow, *ahng*, pronounced with a sort of nasal twang like the French *en*. But since, if he should be on a hunting-party, this perpetual calling to the dogs would frighten the game away, a good leader dog is always taught to understand equally well signals made with the ostoll. If the driver would go to the left, he strikes upon the snow with the ostoll on the right side of the sledge, or gives a gentle stroke with it upon the right hand slider; if he would turn to the right, he strikes in the same way upon the left side. It is a true delight upon such an occasion to have a good leader, so that a man may get almost up to the game without opening his mouth, and reach quietly the tree or bush whence he means to shoot.

A Kamschadale seldom goes out in his sledge without taking with him a pair of snow-shoes, which are an appendage of the highest importance. With these he can go about the hills and forests, how deep soever the snow may be, in pursuit of the

sable; he can even wade amidst the fresh fallen snow, through which the dogs could not make their way without the greatest exertion, but armed with these he can quit the sledge, and lighten it, so that it can follow him with ease. The snow-shoes, in fine, are particularly necessary to prevent injury to the sledge road; for if any one should get out of the sledge without them, he may very likely sink in up to the knee, and this makes great holes, which may prove a great impediment to other sledges.

These snow-shoes are made of a thin piece of board, about four foot and a half long and seven inches broad, sloped off to a point at both ends; at the front end the board is turned up with a curve, and is brought into a little arch in the middle, which makes it very elastic. To facilitate the walking, and particularly to render it possible to go up hill, it is necessary to stretch over it on the side next the snow a piece of skin of a sea-dog, or sea-bear, with the hair outwards, observing to put the skin on so that the hairs shall be towards the hinder part of the shoe; by this means the flat surface makes the going forwards easier, and the rubbing back of the hair renders sliding backwards much more difficult. In the front half of the board straps are fixed, by which the shoe is easily fastened upon the foot; they are put in the front part, because, as that is somewhat raised, the hinder part declines of itself, which exceedingly lightens them to the foot. The length varies from what is mentioned above, according to the size and weight of the person. Those made for boys are much smaller.

There are people who will go up and down hill with these

snow-shoes with extraordinary dexterity, and I have been assured that some, who have a particular knack at walking in them, will clear as much ground at one step as with their ordinary shoes at five, that is to say, they will step fifteen feet. In this instance, walking with snow-shoes has some affinity with skaiting.

Kamschadales, whose principal occupation is hunting, and who will sometimes climb very steep hills in pursuit of the argali, or wild-sheep, make use of a different sort of shoe, which they call ice-shoes. They consist of two small splines, about two feet and a half or three feet long, running parallel with each other at the distance of seven or eight inches asunder, and united together at each end: they have the same curve at the end, and are arched in the middle like the snow-shoes, and are fastened on with straps in the same way. The splines are set underneath with a number of small pointed bones, which stick into the ice, and prevent sliding. They are of great use in all steep places, or in parts where the snow is frozen over, and become slippery like ice. The space between the splines is occupied with leather thongs and cross-bars. Those who live in the neighbourhood of ice-hills or glaciers make use of sharp pointed irons, which they fasten to the foot: they are called posluki, and with their assistance the steepest hills, though covered with ice, may be ascended.

How quick soever the travelling with dogs may be, there are some great inconveniencies attending it. Every man must be his own driver; and in thick forests, particularly if they are upon the descent, as the dogs are sometimes unmanageable,

and cannot be held back, the most adroit sledge-driver may be run against a tree, and come off with a broken head, or a bloody nose; perhaps may be obliged to go the rest of the way on foot. Another consideration is the great dependence upon good weather for performing the journey prosperously, so that in this respect it is almost like undertaking a voyage by sea. When a journey is in contemplation, the weather is watched, and as much anxiety experienced for a favourable wind as at going to sea. Violent snow showers, storms, or contrary winds, often detain travellers on the road, and oblige them to seek shelter in a wood or hut, as in a harbour; or, if at no great distance from the last station whence they set out, they perhaps think the safest measure is to return back. Here they are sometimes constrained to wait several days for a favourable change. At length, when they set out again, they find themselves in a boundless horizon of snow, where, as at sea, they are obliged to take some peak of a hill, or some solitary tree, as a mark whereby to direct their course.

CHAPTER XV.

Particular Occurrences during our Stay at Kamschatka.—Arrival of Lieutenants Schwostoff and Davidoff at St. Peter and St. Paul.—Their secret Expeditions against the Japanese Settlements.—Death of the Chamberlain Von Resanoff.—Further Proceedings of the secret Expeditions.—Death of Lieutenants Schwostoff and Davidoff.—Balls at Kamschatka.—Music.—Hot Springs at Malka.—Journey to Nischney Kamschatka.—Werchnoi Kamschatka.— Milkowoi.— Klutschi.—Description of Nischney Kamschatka.

It would be extending my narrative to too great a length, if I were to enter minutely into all the occurrences that passed during nine months that I remained in Kamschatka, and to give a detailed account of all the observations I made there. I shall, therefore, confine myself to such occurrences as are most worthy of note; hoping that a favorable opportunity may be found in future for giving a more ample description of this peninsula.

About the end of September, the weather continuing fine, I went in company with Captain Dwolf to explore some parts of the neighbourhood, and in particular to visit the hot-springs at Paratunka. At our return, I was not a little delighted to see, most unexpectedly, my old travelling companion and friend, Lieutenant Davidoff; he had arrived in the harbour the

second of October with the ship Awos, to the command of which, as has been already mentioned, he was appointed, when it was finished at Sitcha.

The history of his present movement was as follows. A few weeks after our departure from Sitcha, the Awos being ready to sail, and the Chamberlain Von Resanoff having gone on board the Juno, which was commanded by Lieutenant Schwostoff, the two ships departed together from Norfolk Sound in August.

The Chamberlain, having ever since his unsuccessful mission to Japan, borne the nation no little grudge, thought of revenging the affront by sending a secret expedition against the Japanese settlements in the southernmost of the Kurile islands, if any such were really to be found; his plea for so doing was, that these islands, as we are informed by Pallas in his Northern Collections, had all been previously taken possession of by the Russians. In consequence of this idea, Lieutenant Davidoff was ordered to steer directly for the Kurile islands, and parted company with the Juno in the neighbourhood of Oonalashka. He directed his course to the island of Urup, on which Schelikoff had twenty years before established a Russian settlement, though after his death it was abandoned. On account of contrary winds and dreadful storms, he thought it not prudent for this year to attempt landing and examining the islands, and he therefore altered his course, and came to the harbour of St. Peter and St. Paul, there to pass the winter, expecting to rejoin the Juno, which, according to appointment, was to meet him there. Lieutenant Schwostoff had reached Ochotsk in September, and having received orders to join in the secret ex-

pedition, he also came with that view to St. Peter and St. Paul in November.

It will easily be imagined how great a pleasure it was to Captain Dwolf and myself to meet again, in a manner so unexpected, friends with whom we had passed the former winter on the north-west coast of America, upon such a sociable and confidential footing. From Lieutenant Schwostoff we learnt that he had landed the Chamberlain Von Resanoff at Ochotsk the end of September, who had immediately proceeded forwards to Irkutsk. At Ochotsk he learnt that the Imperial Russian embassy to Pekin, under the conduct of Count Golofkin, had experienced nearly the same fate as the embassy to Japan, and, like that, had been wholly abortive. One of the naturalists attached to it, the college assessor, Doctor Redoffski, was at that moment at Ochotsk, and thought of coming to Kamschatka, for the purpose of acquiring a more ample scientific knowledge of the country; he thence proposed visiting the Aleutian Islands: the plan of his journey was to take the post in the winter and cross the bay of Penschinck.

Lieutenant Schwostoff received before his departure from Ochotsk additional instructions with regard to the secret expedition, and sailed in October towards a Russian island lying to the south, on which he found a Japanese settlement with considerable magazines. Of this he took possession without any attempt at resistance being made, asserting the prior right of the Russians to the island. He brought away with him nearly a thousand pood of rice, a quantity of tobacco and fishing nets, a great number of lackered cups and vessels,

tobacco pipes, a tolerable store of salt, and an immense quantity of dried fish, besides silks, cottons, paper, Indian-ink, pictures, and other objects. A considerable portion of all these articles which he could not bring away with him, he made over as a prize to the native Ainus. Four Japanese, to whom the care of the magazines was confided, were brought as prisoners to Kamschatka.

In this manner did the Japanese first learn, through the mortified *amour-propre* of the Ex-ambassador, to understand, in some degree, the extent of the Russian power. The undertaking had, at least, some colour of justice, and all possibility of M. Von Resanoff's ever being called to account for the measures he had pursued, was precluded by his death, which happened the following year at Kranojarsk, on his return to St. Petersburgh: it was occasioned by his horse falling with him on the road from Ochotsk.

As I shall have little opportunity hereafter to mention Lieutenants Schwostoff and Davidoff, or to speak of their expeditions against the Japanese settlements, I hope I may be excused if I deviate somewhat in this place from the regular chronology of my narrative, and here conclude what I have to say upon this subject, and upon their lamentable fate.

After passing the winter with us in the huts of Petropaulowsk, where we partook together of the best cheer the country afforded in fish, rein-deer's flesh, and other of its productions, above all, in the excellent rice brought by the Juno, having lived in the utmost harmony, sharing many parties of pleasure;

---after all these things, in the spring of 1807, the two friends prepared, according to the instructions they had received, for a renewal of their military enterprizes, to free the southern Kurile Islands, where the Japanese had formed settlements, from these new intruders.

On the second of May the Juno and Awos sailed from Awatscha Bay, directing their course immediately to the Islands of Urup and Iturup. On the latter they found a number of armed Japanese, who at first made a shew of resistance with their bows and arrows, but soon took to flight, abandoning their habitations and magazines entirely to the Russians. The latter found in them a number of very beautiful lackered utensils, books, maps, a large provision of rice and salt, tobacco, clothes, working tools of various kinds, every thing, in short, necessary to life. Among other things worthy of remark, were some pieces of cannon, muskets, swords, cuirasses, helmets, bows and arrows: we were after this manner indebted to these brave men for becoming acquainted with a number of objects which we endeavoured in vain to obtain during our six months' stay at Nangasaki. From the principal ship-builder, Korukin, I obtained an accurate sketch of one of the cannon, which appeared to me an old Spanish piece: there were others which M. Korukin assured me were exactly the same; and to judge by the letters inscribed upon them, they must have been entirely of Japanese workmanship.

The four Japanese who had been brought to Kamschatka the preceding year, and who, during their winter's residence there, had acquired something of the Russian language, were, on this

occasion, carried back to their own country, and desired to instruct their countrymen that the Russians had more just claims to these islands than themselves, inasmuch as they could urge priority of possession. A paper to this effect was given them, on which was painted the Russian flag. A great part of the abovementioned interesting objects were afterwards transported by our navigators to Ochotsk, where they were unjustly seized by the Commandant of the place, Captain Bucharin, and scattered about in a manner very injurious both to the crown and to the Russio-American Company.

These two excellent officers, Lieutenants Schwostoff and Davidoff, after experiencing a great deal of chagrin and many hardships, went in the autumn of this year to Irkutsk, and at length, in the spring of 1808, returned to St. Petersburgh. From their well-known courage, resolution, and professional talents, they were employed in the war against Sweden, in which they distinguished themselves in the command of the gun-boats. Crowned with laurels, they repaired once more to the capital, and about the same time, in September, 1809, our common friend, Captain Dwolf, arrived at Cronstadt with a cargo of goods from the United States of America. It was no little pleasure to all the party to be thus once more reunited, and we all flattered ourselves, that, as we had passed one dreary winter together on the north-west coast of America, and another at Kamschatka, we should now spend a joyous one amid the gaieties to be found in the Imperial residence.

We had passed the evening together, and talked over with delight all the dangers we had experienced by sea and by land, all the adventures that had befallen us. We related to each

other the particulars of our present situations, adverted now to this, now to that circumstance which had happened to us on the other side of the globe, and thus reciprocally entertaining and entertained, sat till very late. It was about two in the morning when Lieutenants Schwostoff and Davidoff left my house to go home to their apartments in Wasili-Ostroff, on the other side of the river. Captain Dwolf and myself accompanied them to the draw-bridge, which was opened for any ships that might want to pass in the night. Our friends therefore passed over a plank which lay from the bridge to a vessel in the river, and regained the other side of the bridge by another plank, calling to us and wishing us a good night, when they were safe over. Captain Dwolf, who had only come from Cronstadt upon a visit, returned home with me.

The next morning we received the melancholy information, that two sea-officers had been drowned in the Neva during the night, when upon farther inquiry, we found---oh fatal! oh ever to-be-lamented event!---that they were our friends. They had, God knows with what view, after we parted from them, been desirous of returning to us again, and in order to get over the quicker, had attempted to spring from the bridge upon a bark that was going through. Most unfortunately they missed the bark and sprung only on the sail, whence they were instantly thrown off into the water, and became a prey to the rapidity of the current. Attempts were made by the people in the bark to give them assistance, but the night was so extremely dark, that all their attempts were vain.

Thus early was terminated the career of these brave, these excellent men. Regardless of dangers or toils, twice had they

undertaken journeys from St. Petersburgh to Ochotsk, and from thence engaged in voyages to the north-west coasts of America, to California, to the Aleutian and Kurile Islands, from all which they had returned home in safety. Together had they served in the Swedish war, where both had distinguished themselves as heroes, and, inseparable to the last, together had they come to a most untimely end. Thus was the state deprived of two most excellent and valuable citizens, and their connections of two of the most amiable and sincere friends that mortals could ever boast of possessing; of friends whose memory, all that knew them, can never cease to cherish with the highest esteem, affection, and regard. A life such as theirs is its own best reward on earth, but heaven will surely bestow upon them much richer rewards in a world to come,---will repay with interest the disinterested sacrifices they made of themselves for the sole purpose of seeking to ameliorate the situation of the Aleutians at Oonalashka, at Kodiak, and at Sitcha.

My readers will, I hope, pardon this digression, drawn from me by the never-ceasing regret I cannot help feeling for so irreparable a loss, aggravated, if possible, by the recollection that the last evening of their lives was passed under my roof.---I return now to the relation of such occurrences as are most worthy of note during my stay at Kamschatka.

About the end of October we made our first essay in travelling with sledges drawn by dogs, and by the ninth of November winter was completely set in: the cold was, at this period, from about twelve to eighteen. Captain Dwolf, with Lieutenants Schwostoff and Davidoff, and myself, often made parties

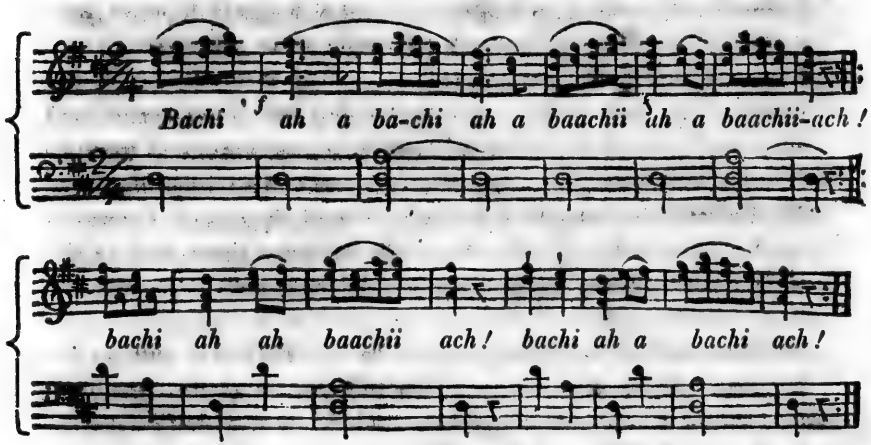
to different places in the neighbourhood; particularly to Paratunka, Awatscha, Korak, Natschika and Malka; and when we were at home, the evenings were frequently passed in dancing. Some of the wives of the higher officers, and of the Commissaries of the Russio-American Company, with Mademoiselle Lariwanoff, were our principal ladies, and we had besides occasionally the under officers, with their wives and daughters; although it was not strictly consistent with etiquette to invite them. We most commonly danced English country-dances. Some soldiers who could play upon the violin, the bandura, and the balalayka, a kind of Russian national instrument, with two or three strings, were our musicians.

By way of variety the Kamschadales were sometimes invited to entertain us with one of their national dances. In these, both the men and women imitate the movements and manners of sea-dogs and bears, and go from the gentlest, softest motions of the head and shoulders, to the most violent motions of the whole body. They sing themselves to their dancing, stamping upon the ground in a very expressive manner to mark the time, and sighing with a short *ha!* or *ah!* frequently repeated.

The great national song is called the *Bachia*, a word, the constant repetition of which constitutes the whole of the song; I could not discover that it has any kind of meaning whatever. The melody of the song is not devoid of expression. Counsellor Tilesius, having taken down the notes when we was staying at St. Peter and St. Paul, has been so obliging as to favour me with a copy, which I here present to the reader.

BACHIA,

Or Music of a Kamschadale National Dance.



When I was tolerably well accustomed to going in a sledge, and could venture upon distant excursions, I made one to the village of Malka, a place of some size, a hundred and thirty-eight versts from Petropaulowsk, to visit the hot springs in the neighbourhood. The water rises bubbling out of the earth in a charming valley, where the scenery around is enchantingly beautiful. In summer, when the woods are clothed with green, and the plain, which was now one entire waste of snow, is covered with a rich verdant carpet, I conceive that the country every way must be extremely varied and pleasing.

Among the minerals to be found about the principal spring is a white calcareous crystal, partly in the form of a kidney, partly flat and leafy. The water has a faintly nitrous smell and taste. Within a circle of about half a verst there are three or four of these boiling springs, which soon unite in a little stream, and though still more than lukewarm, I observed little fish in it, which seemed much like our *gasterosteus* or stickleback. Close by the stream is a small reservoir, in which the water cools: this is used as a bath; and in the neighbourhood some huts have been built for the accommodation of persons afflicted with the gout, or other diseases. The inhabitants of Malka sometimes bathe in the water, and they use it for washing their white linen. Flesh or fish left for a short time in the water at the spring, comes out perfectly cooked.

I returned back from this place to the harbour, and on the fifteenth of January set off with my own dogs for Nischney Kamschatka. I passed again through Malka, which I reached on the nineteenth, and the next day proceeded to Ganal, forty-one versts farther; there I stopped for the night, and on the twenty-first, continued my journey to Puschtschina. This is one of the longest post-stations on the western side of the peninsula, and pays as sixty-four versts, though the Kamschadales say that it is in reality seventy-six. As some ease to the dogs and travellers, a hut or *jurditschka* has been built at the distance of twenty-five versts from Ganal, where, during the whole winter season, a man is stationed, that people may stop if they please to rest themselves awhile, and give their dogs a morsel of dried fish.

A few versts from hence the two chains of hills, which divide

the peninsula from north to south, approach each other, and are united as it were into one hill, which may be considered as the natural party-wall between Middle and Southern Kamschatka. The country is remarkable, and lies probably very high. In the neighbourhood rise the following rivers: the Bustrareka, which runs in a south-westerly direction to Bolscheretsk; the Awatscha river, which runs into the bay of the same name; and the Kamschatka river. The latter, after a course of more than four hundred versts north-easterly, runs into the sea at Nischney Kamschatka.

On the twenty-second, I arrived at Werchnoi Kamschatka, one of the most considerable places in the peninsula. It lay formerly directly upon the Kamschatka river, but in the summer of 1805 this river was so extremely swollen with the melting of the snow, a more than usual quantity of which had fallen the preceding winter, that a dreadful inundation was expected, when suddenly, at the moment that the danger seemed the greatest, the river broke itself a new channel at some versts from the town. This circumstance, though a relief at the moment, has since proved a great hardship, as it has deprived the inhabitants of their fishery, which was very advantageous to them: the old channel of the river has ever since been a very insignificant stream, in which no fish of any consequence are taken.

In this place there are two ecclesiastics, but the church is old and partly in ruins, so that it is very little frequented. The Military Hospital, which particularly attracted my attention, is terribly neglected; it is extremely confined, even for

the few sick that it contains. The windows are all fast closed, so that the air cannot by any means be admitted: the entrance is at a great distance within the court, and there is no kitchen, so that the victuals are cooked at the stoves, by which the apartments are warmed. The only medicines they had at this time were the remains of some that had been brought by Captain Krusenstern; the beneficial effects of this expedition were therefore visible two years after.

There are at Werchnoi Kamschatka about sixty soldiers and thirty Cossacks, who all are, or at least ought to be, occupied in husbandry. Here are above a hundred head of cattle, and a number of horses, which belong chiefly to the crown, without any man deriving the least advantage from them. The inhabitants, from their extreme negligence, have often by the spring scarcely any thing left to eat: they make a very slender provision of winter stores, and the fish do not come into these parts till late in the season.

The country hereabouts is tolerably well peopled: in the first thirteen versts I found three villages, the inhabitants of which are chiefly supported by husbandry and feeding cattle. The most considerable of these places is Milkowoi Derefina: it is inhabited by Russian peasants, whose ancestors, seven in number, were sent hither from Russia about seventy years before, for the purpose of introducing agriculture; they are now increased to about eighty souls. The principal person of the village assured me, that for nine successive years his corn had yielded from five to eight fold the seed sown. This man, upon the representation of the Governor, Major-General Von Kos-

cheleff, had been honoured with a medal from his Imperial Majesty for his services in the promotion of agriculture.

All the peasants of this village draw the greatest part of their nourishment from the rich produce of their own fields. They have bread from corn of their own growth, potatoes, white cabbages, turnips, radishes, cucumbers, fish, flesh, milk, and game, in profusion. In this place are kept eighty-five cows, and twenty-two horses; in the flat country the latter can be used the whole year through.---Agriculture, it is plain from this instance, is by no means impossible at Kamschatka. In the continuation of my journey, I found that in some parts, particularly in the country about Kosirefsky and Tolpatsch, the snow was never so deep in the winter but that the cows could be left out in the fields.

On the thirtieth, in the evening, I arrived at Klutschi, or Klutchefskaia Dereffna, which, like Milkowoi, is inhabited principally by Russian peasants and Cossacks, and is tolerably flourishing. Agriculture, grazing cattle, fishing, and the chace, supply the inhabitants with food abundantly: the climate and the soil are not so good as about Werchnoi Kamschatka. Klutschi lies at the foot of a high peaked volcano, which constantly either smokes or throws out flame; in the latter case it may be seen in the night to the distance of three hundred versts, or even farther*.

* Of this volcano a very ample description is given in the excellent *Memoires de la Societé Imperiale des Naturalistes de Moscou*, 1809.—However worthy of credit this description may appear, I must at the same time doubt exceedingly the possibility of ever ascending this extraordinary steep mountain. Major Von Friderici, who had the

The village contains more than twenty houses, a church, and the only school in the peninsula: here the sons of soldiers only, never the Kamschadales, are taught reading, writing, accounts, and music. It is difficult to say whether the whole organization of the school or the buildings are most in want of improvement; the latter are far too confined for the number of boys, which is now seventy. The rooms are small and dark; instead of glass, the windows are only of fish-skin: there is no kitchen, so that the victuals are cooked at the stove of the school-room. The principal food of the scholars is fish, which they must catch themselves: they often therefore, for want of a sufficiency, suffer very much from hunger, and in the sequel, from scurvy. The schoolmaster is an old discarded subaltern officer, who does all that his strength and abilities will permit to discharge his trust faithfully.

The lazaretto here is in an equally wretched condition. The greater part of the patients, when I visited it, were school-boys, who, for want of good air, good food, and a proper attention to cleanliness, had terrible scorbutic sores in their feet. After receiving the utmost hospitality from the Chief of the village, Wassili-Iwanowitsch, I set out on my last day's journey, and arrived at the capital of the peninsula, Nischney Kamschatka, on the second of February.

The Governor, Major General Von Koscheleff, with whom I was already acquainted, from his having come to meet the ambassador on our first visit to Kamschatka, received me with

most eager desire to ascend it when he was in these parts in the summer of 1804, was obliged, after several vain attempts, to relinquish the undertaking as impossible.

all possible testimonies of friendship, and did every thing in his power to make my visit, which happened just at the time of the carnival, agreeable to me.

The town lies on a neck of land at the confluence of the rivers Raduga and Kamschatka. Here are two churches, and about a hundred houses. It is the seat of a general's staff, of the crown officers, of the ecclesiastics, that is, a protopapas or chief-priest, and two sub-priests, an army surgeon, several merchants, tradesmen, citizens, soldiers, and Cossacks. In the night, between the thirteenth and fourteenth, I was woke by a pretty considerable shock of an earthquake. This is no very uncommon occurrence here, and is perhaps principally owing to the town not being at a great distance from the volcano of Klutschi.

Notwithstanding the storminess of the weather during the whole of the carnival, it was much pleasanter than could have been expected in Kamschatka. The Governor had two ice-hills made, that favourite national amusement of the Russians: he gave several balls, and on the last day a masquerade, at which were present sixty persons, including both sexes. The Governor keeps a public table for his officers the whole year through, and in such a country this is no trifle. He invited me with the utmost hospitality and politeness to be his constant guest, and we were always entertained with excellent cheer. We had fresh, salted, and smoked geese and ducks, fresh and smoked rein-deer's flesh, and wild sheep's tongues, with excellent salmon, and many other well-dressed and well-flavoured dishes. Indeed, I passed my time on the whole so pleasantly,

that I could almost have forgotten I was at Kamschatka, had I not been, alas! too often reminded of it by accessory circumstances. It is indeed lamentable, so many sick as one sees both among the Russians and the Kamschadales, to think that the country is almost entirely destitute of medicines. The army surgeon often expressed to me how much he was distressed at the impossibility he was under of administering relief to the sufferings which his situation obliged him to witness.

The only medicines in the country are those sent from Russia for the use of the army, and these come in such small quantities, that the surgeon, though he appeared to be well skilled in his profession, was really deprived of the power of shewing his skill. But what appeared still more strange was, the nature of the medicines sent: they consisted principally of steel-filings, juniper-berries, essence of spruce, of which there were several poods, calcareous powders, and other things of the same kind; not an emetic or purgative medicine, no opium, nor any preparations of mercury, not any in short of the most important and useful medicines.

What an immense advantage it would be to the empire, if ships were regularly dispatched every year from Europe to furnish this part of it with a supply of medicines, clothes, and other objects of the first necessity, at a reasonable rate. But of how much greater advantage would it be, if some real patriots, men of science, knowledge, activity, and benevolence, would resolve to visit this undeservedly ill-famed country, to study its natural productions, and its means of improvement, and then lay plans for introducing a better order of things;—

an order, which, being founded upon general, as well as local knowledge, would have every possible recommendation. This appears so much the more necessary, as I do not know that since the establishment of the colony any of the officers belonging to the military government have ever conceived the idea of such an examination;---that any one has ever thought of taking a philosophical survey of the country, with a view to ascertaining what it is capable of being made;---that the attention of any one has ever been directed to the benevolent purpose of promoting its welfare and happiness, though in so doing he would render an essential service to the state of which he is a member.

CHAPTER XVI.

Departure from Nischney Kamschatka.—Death of Redoffski.—High Chain of Mountains.—Excursion to the Coraks.—Their Rein-deer.—Manners and Customs.—Western Side of the Peninsula of Kamschatka.—The principal Towns.—Return to St. Peter and St. Paul.

About the end of February, I began to think of my return to the harbour of St. Peter and St. Paul, and determined to take the road by Tigil and Bolscheretsk, on the western side of the Peninsula, which was indeed farther about, but had the recommendation of being new to me, so that I should have an opportunity of gaining a still more extensive knowledge of this remarkable country. By the second of March every thing was ready for my departure. It would be to the highest degree ungrateful of me, were I not here to make my warmest acknowledgments to M. Von Koscheleff and his brother for the very hospitable reception which they gave me, and for the numberless proofs of friendship and esteem with which I was honoured by them. After taking a farewell breakfast with these good friends, and offering them my warmest wishes of welfare and happiness, I set out on the second of March from Nischney Kamschatka.

I had not proceeded more than sixteen versts on my way, when I met the post from Europe, the arrival of which I had

long anxiously expected. I hoped that the great naturalist, Doctor Redoffski, would accompany it, and I had for several months thought with the greatest pleasure of becoming acquainted with him. My first question on meeting the post was "*Where is Doctor Redoffski?*" and my concern may easily be imagined when I was informed that he was dead. According to the account given by the Cossack who brought the post, he had died a short time before at Ischiga. This circumstance induced me to return back to Nischney Kamschatka, where I learned from the letters brought, that he had indeed, in a moment of melancholy, put an end to his own meritorious life after he had overcome the greatest hardships and difficulties of his journey, and had nearly reached the place of his destination.

On the following morning, at day-break, I recommenced my travels, and about one o'clock reached Kamina, sixty-five versts from Nischney Kamschatka. Here the two high roads divide, one of which goes to Werchnoi Kamschatka, and the other to Tigil. On this latter road the first station is at the village of Chartschina, which is celebrated all over the country for the universally admired and delicious fish called *hokzi*, a species of salmon. I stopped for the night at Chartschina, and the following day proceeded to Jellofka, fifty-seven versts farther: the environs of this place are agreeably varied by groves of fir, birch, and alder, and by pleasing hills and vallies. To go from hence to Tigil, a pretty considerable chain of hills must be crossed, which, running from north to south, make two great divisions of Kamschatka to the east and to the west. Many persons are afraid of taking this road, since violent storms and snow-showers are often to be encountered among the moun-

tains, and the track is so little beaten as to occasion great inconvenience to travellers. They are not unfrequently a fortnight in getting from Jellofka to Tigil, though the distance is only a hundred and sixty versts, and if they have not provided themselves very amply, are in danger of running short of food. As in all this distance among the mountains, there is no town or village, two houses for travellers to rest have been built, the one about forty-six versts from Jellofka, and the other thirty-nine versts farther; these serve as places for shelter in stormy weather.

On the sixth of March, about seven in the morning, I set out upon this formidable undertaking, in company with several soldiers and Cossacks who had assembled at Jellofka. The road was excellent, and the weather clear and fine to a very unusual degree. We had several hills to cross, some more, some less considerable; two among them were particularly to be distinguished. On the top of one, the traveller, on such a day as that we were so fortunate as to be favoured with, enjoys a most picturesque prospect. The volcano of Klutschi, vomiting forth flames, appears close at hand; the hills, some of them considerable, strewed around, appear like a wavy plain, gradually descending, till the little hillocks are lost; at length on the widely extended horizon. The snow on this lofty summit is never very deep, being dispersed by the constant wind; and on account of the extreme cold of the atmosphere, it is at all times so firm and hard, that it may be traversed without the least difficulty or danger. Vegetation almost entirely ceases: only here and there upon the declivity creeps a solitary dwarf cedar.

The second great height on the north-west side is extremely rapid in the descent; and it is among the most masterly performances in sledge driving, if a man can descend this hill with the dogs to the sledge, keeping it in an exact balance so that it shall not be overset. The dogs are therefore usually taken off and fastened behind the sledge, and the driver with his ostoll, guides the sledge, and supports himself in it. Most of my travelling companions, both soldiers and Cossacks, and even my Kamschadale guide, could not keep their seats, but were jerked out, and had to descend the greater part of the way on foot. Upon the whole, however, the appearance is more formidable than the thing itself, since there being neither trees, rocks, or precipices in the way, consequently no fear of meeting with any accident need be apprehended; it was therefore droll enough to see how one after the other was cantered out of his sledge, some in one way, some in another, and how they were rolling and tumbling about.

At the foot of this hill, near a wood, lies the first house of rest, which we reached, while a considerable portion of the day still remained. We found here much less snow than in the country on the other side of the mountain. The weather being very clear and calm, and there being a moon to assist us, we determined, with the unanimous approbation of the whole party, to make only a bait here, and to proceed forwards to the next house of rest before we thought of stopping for the night. Accordingly, after taking some tea, with bread and dried fish, and giving our dogs a morsel of jukola, in three hours we again set forwards. Nature has here, as it were, broken a path over the mountains. Winding among hills, and sometimes almost per-

pendicular rocks, one while inclining to the right, another to the left, the road ascends gradually, till in some hours a very considerable height is attained almost imperceptibly. Sometimes this road runs among narrow gulleys, sometimes it is over a widely extended plain, where the traveller is assailed by terrible gusts of wind and snow-showers. Along this plain high posts are stuck into the ground at no great distance from each other, which serve as guides to the traveller when the hills and rocky points are concealed from his view by the snow-clouds, or by fogs. Notwithstanding these posts, as the snow storms are sometimes so violent that travellers can scarcely see the foremost dog in the sledge, they have not unfrequently been known to lose their way.

After going about twenty wearisome versts, when we had at length reached the last hill, we were suddenly surprized by seeing spread out below us, the whole western side of the peninsula, gilded by the evening sun. From hence the road was very much upon the descent, and the dogs were with difficulty held in; the smell also of the numerous wild rein-deer, which we saw, made them run with much greater eagerness. In many places there was so thin a layer of snow, that blocks of stone, and patches of earth, withered grass, and moss, were to be seen peeping through it. It was, however, growing so dusk that I had not light sufficient to examine any of these objects accurately, and as I could not make my dogs stop for a moment, I called to my Kamschadale guide, begging him to pick up some of the stones for me, and keep them till we got to our resting place. This, however, he flatly refused, saying that if a single stone were touched a dreadful storm would immediately arise.

About eleven o'clock at night we arrived at the second house of rest, not a little fatigued. In the neighbourhood of it there was so little snow, that we had in many places gone over dry land and grass. At our arrival we found several travellers who had come from Tigil, and who, full of apprehensions at the journey before them, envied us not a little our good fortune in having got through it so happily. On the seventh we passed the night at Sedanki, a place, the inhabitants of which are properly of Corak origin: their language is not properly either the Kamschadale or the Corak: it is one peculiar to the country, and is in use northwards of this place as far as Palan, and southwards as far as Itschi. The next day I reached Tigil, where I resolved to make a stop to rest myself and my dogs.

Tigil, commonly called Tigilskoi Krepost, that is the fortress of Tigil, lies on the right bank of the river of the same name, which is navigable for small vessels. The anchoring place for vessels coming from Ochotsk is about fifteen versts from the mouth of the river, and about thirty from the fortress. Tigil is a very interesting spot in the history of Kamschatka; it was the first place in the peninsula where the Russians established themselves, and from whence they proceeded to their farther conquests. Besides several buildings belonging to the government, there are here about fifty houses, and a church. The place is poor in fish, and the river is so rapid, that it is difficult to catch them either with hooks or nets; Providence has therefore provided for its being supplied with food in other ways. In the neighbourhood are vast numbers of rein-deer, and the northern neighbours, the

Coraks, drive their numberless flocks of tame rein-deer into the country, which they barter with the Russians and Kamschadales for trifles, such as powder and shot, brandy, tobacco, mushrooms, *agaricus muscarius*, kettles, axes and other iron wares: through this traffic, such quantities of rein-deer are procured, that the people have always a plentiful supply of flesh for food, and skins for making their clothing.

I had learnt that these Nomade people were in great numbers northwards of this place, and at no considerable distance, and I therefore resolved to make them a visit. The Commandant of Tigil, an under officer, lent me dogs and an interpreter, with whom I set forwards on my expedition upon the tenth of March.

We passed through several valleys, and when we had gone about thirty versts, reached the river Omanina, which flows into the sea of Ochotsk, about seven or eight versts from Tigil. On this river lies a Kamschadale village of the same name, but it is now almost destroyed, and does not contain above three inhabited houses. Not far from this river I found the first traces of the Coraks, or rather of their rein-deer: it seemed almost as if an army had been encamped on the spot. Many thousands of these animals had beat down the snow to such a degree, and made roads in such numberless directions, that the travelling was rendered extremely rugged and difficult to the dogs. I followed my guide through this valley, lately so animated, but now almost desert, and towards evening had the pleasure of finding a party of Coraks with their flocks.

I went into the hut of the principal Corak, by name Prolok.

He is the proprietor of, at least, two thousand rein-deer, which were all feeding close by his habitation: he immediately killed two to regale me, my guide, and our dogs. The marrow out of the bones, while they were still warm, was brought to me as a dainty, and a token of friendship and hospitality; and the tongue, which is considered as the best part of the solids, was immediately cooked.

Though the language of the Coraks is very different from that of the Kamschadales, they do not differ from them very much either in their features or manners, and their clothing is nearly the same. The principal difference is, that, instead of the cape to their garments, they have a sort of hood; and instead of the opening at the bosom, there is a sort of breast-piece hanging down from below the chin. There is no difference in the dress of the men and women; they are only to be distinguished by the women not having their hair cut short as the men have. I could not perceive that the men had any beards: they pluck the hairs up with pincers, as I was informed, when they begin to grow: their hair did not appear to me so very dark as that of the Kamschadales.

The Coraks live in conical huts, the skeletons of which consist of long poles, and over them are stretched the skins of rein-deer, with the hair still upon them. About the huts stand sixty or seventy sledges, which, in their migrations, carry the poles and skins that make their huts, with their household utensils, and other things of various kinds. Such a number of sledges are the more necessary, as the rein-deer are weak, and can only draw a very small load. The day-light is admitted into the

huts by a hole at the top, which serves also as a chimney to let the smoke pass. In the inside of the hut divisions are made with the skins of rein-deer, which have an opening on the side towards the fire; but this can at any time be closed by a skin which draws over the opening like a curtain; day-light is then entirely shut out from the little chamber, but it is protected by the same means against smoke, and against cold. The chief lives in the principal division, which is opposite to the entrance, and the rest of the family and dependents inhabit the side apartments. The whole hut has the appearance of a place for smoking fish, and the most disgusting filth reigns every where. A number of large dogs, which are principally kept for the chace, have free egress to the house, even into the little sleeping rooms. The skins of these dogs are much used as bordering for the garments.

The undigested moss taken from the stomachs of the rein-deer when killed is cooked, and mixed with train-oil as food for the dogs, and sometimes even for the human beings. It is remarkable here to find a nation, whose whole wealth, whose very existence, it may be said, whose food and clothing, depend in like manner upon the rein-deer, as the Aleutians upon the sea-dog. The huts, and clothes of all sorts, are made of the rein-deer skins; the entrails serve for many purposes, and the flesh is almost their only food. At the same time the superfluities of their flocks serve them as the means of procuring other articles of which they stand in need by the intercourse of trade they are thus enabled to carry on with their neighbours. It is said that the sort of mushrooms which they procure from the Kamschadales, are preferred by them as a

means of exhilaration or intoxication to brandy. Some remarks of mine upon this subject will be found in the Annals of the Society for promoting the knowledge of Natural History.

In the traffic carried on with these people, a glass full of brandy, even to running over, be the glass ever so small, is preferred by them to a large glass only half full, though perhaps really containing twice as much in quantity. My host at Tigil therefore lent me a very valuable glass for my present excursion, which did not hold more than half an ounce. Instead of dishes these people make use of a sort of wooden trencher, out of which they and their dogs eat promiscuously. Their drink consists the greater part of the year of snow and ice, which is melted in a kettle kept constantly hanging over the fire for this purpose. The assertion of many physicians that the goitres so prevalent in the Swiss Cantons and the Tyrol arise from the use of snow-water is by this circumstance completely refuted, since no such thing as a goitre is to be seen among the Coraks; and even in summer-time, as they withdraw with their rein-deer into the mountains, snow-water is still almost their only drink.

The business of the men consists in hunting the sable, the wild rein-deer, and the argalis or wild sheep. They have besides the care of the cattle, which feed about the houses, and of the numerous flocks of tame rein-deer. Here, as in Brasil and California, the cattle are caught, when they are to be slaughtered, by throwing a sling round the horns. When this is done, and the beast is killed by a knife being stuck into the heart, it is consigned over to the women, who then flay it, take

out the entrails, and cut it up ready to be cooked; they afterwards prepare and cure the skin for clothing. It is also the business of the women, when a migration takes place, to take down the houses, and pack the poles and skins upon the sledges, as well as all the other houshold articles that are to be transported: when arrived at their new station, they build the houses up again. As soon as the moss about the habitations is all eaten up, a migration takes place; the people with their rein-deer proceed some versts farther till they find good feed: in this way they traverse every year a considerable extent of country from north to south, that is, from the neighbourhood of Ischiga to the middle of Kamschatka, near Itschi, supplying by the way almost the whole western side of the peninsula with rein-deer's flesh.

The Coraks live in a state of constant enmity with the Tschutski, their northern neighbours, and unite themselves rather with the Russians, from whom they procure many articles of the first utility, without the danger of any unpleasant consequences.

Their weapons consist chiefly in bows and arrows; some have learnt the use of fire-arms, and understand the superiority of them for the chace above bows and arrows perfectly well. I saw no other musical instrument than a sort of tambourine, which had iron rings round it, and was struck with the stuffed foot of a dog. Their singing resembles very much that of the Aleutians and of the people on the western coast of America; and the dancing, like theirs, consists only in a simple movement of the body, without quitting the spot.

On the eleventh, late in the evening, I returned to Tigil, whence I set out the next day for Bolscheretsk. I went for curiosity's sake the twenty versts to the first station at Napani with rein-deer. The novelty of the thing certainly excited my interest, but I must give the preference exceedingly to dogs. The rein-deer at first run much faster, but they tire very soon, and must always be fed at intervals of ten or twelve versts. Dogs of only a middling kind, by the steady uniform pace they keep, will sooner reach a distant place; besides this, the rein-deer are troublesome, from the quantity of snow they throw up in the traveller's face. I was rejoiced therefore on the thirteenth to return again to my dogs, and travel with them over the western coast of Kamschatka.

The snow never falls in such abundance on this side of the peninsula as on the eastern side. It is notwithstanding colder, partly on account of its lying so much higher, and partly on account of the frequent north-west winds and fogs; it is dreary, and on the whole less pleasing: in many parts the country is overgrown with the rein-deer moss. The rivers do not in general abound near so much with fish, and it is only in a few small villages that the land is capable of being cultivated. But this very want of fertility secures to the inhabitants the advantages to be derived from the rein-deer: this advantage, however, has been extremely neglected, and has only recently under the present Commandant been made anew an object of attention. General Von Koscheleff has begun to purchase rein-deer from the Coraks for the Crown: the number procured already amounts to three hundred, and if his successors will pursue the object with equal diligence, there is

no doubt but that in a few years the great want of animal food in this part of the peninsula will be entirely remedied.

The principal places in the rest of the way from Tigil to Bolscheretsk are first: Charinsoff, on the river of the same name. In this river are sometimes found a sort of stones of schistus and jasper, which the inhabitants use as whetstones. At the distance of about thirty versts from the coast are some rocky islands, which in spring are much visited to collect the eggs of the numbers of sea-fowl that make their nests among them, or to catch sea-dogs. It is incomprehensible how people for the sake of a few eggs can trust themselves out at sea in such wretched canoes as they build; their lives are in manifest danger at every moment. Perhaps it is still more incomprehensible that they do not endeavour to construct boats of a better kind.

The next station to Charinsoff is Bellagolowa. In this part of the road the snow was frequently so much melted, that the sledge could hardly get on, and I was obliged to go on foot. Moroscheschna, on the right bank of the river of the same name, is a considerable place, and in a pleasant situation, on the declivity of a small hill: the river runs at the foot of this hill, and flows towards the sea along a wide spread valley. A great many sea-dogs are taken at the mouth of this river; they are chiefly caught with nets: their skins and fat are considerable articles of barter with the Coraks.

From Soposchnowa, the Kamschadales sometimes lay aside their dogs to go over the hills to Werchnoi Kamschatka. The

way is in one respect good, inasmuch as the chain of hills is here extremely diminished, and there are no considerable ones to cross. But the number of little brooks that are never frozen over are even dangerous, and merely in the coldest month, February, passable.

On the seventeenth, I arrived at Itschi, a not very small village, with a church and two clergymen. The snow was here, as indeed along the greatest part of this western coast, very much melted. Potatoes, white cabbages, turnips, and radishes, grow here extremely well. Corn however, and particularly buck-wheat, on account of the frequent cold north-west winds, does not grow so well as by the Kamschatka river. Many cattle are fed;---besides a great number of cows, I saw twenty-six horses.

The neighbourhood of this place is commonly the southernmost part visited by the Coraks with their rein-deer: hence they commonly set out again on their return northwards. Fifty versts from Itschi is found a fine grained sandstone, which the inhabitants send all over the peninsula as whetstones.

After giving my dogs a day of rest, I set forwards again on my journey on the nineteenth. Several rivers which I was to pass were already free from ice, which circumstance hindered me in my journey very much, as they were now less easily crossed. On the twenty-first, I arrived at Worofskaia, upon a pretty considerable river of the same name: the mouth of it is in a large bay, and has a sufficient depth of water to admit small vessels from Ochotsk. Many vessels indeed pass the winter here.

As sea-fogs are perhaps stronger and more frequent in these parts than in any other, and the fish therefore cannot be so easily dried, indeed are very likely to become putrid, the people generally have the precaution, otherwise extremely useless, of having the fish designed for jukola smoked for a day as the first part of the process of curing them. A Russian who has established himself here as a peasant is the richest man in the village. He regaled me with large well-flavoured potatoes, with beef, fish, berries, and game: he told me, among other things, that his buckwheat had yielded him for five years from four to seven-fold the seed sown. He had twenty-two cows, two horses, and a number of good dogs; he lived, in short, in abundance, from the fruits of his own industry: this was principally exercised in agriculture.

The next day I arrived at Bolscheretsk, formerly the principal town of Kamschatka, and very populous, but now extremely fallen and reduced. It lies in a large plain, which stretches from Itschi along the sea-shore: the whole country is heath and waste, almost covered with rein-deer moss. Formerly this extensive tract was animated by vast flocks of rein-deer belonging to the Crown, which consisted of two or three thousand each; but to satisfy the avarice of the Commandant of that time, they were all sold. At the mouth of the great river, thirty versts from the town, is a bay; the river itself forms a harbour, but not indeed a very good one: the depth of water is not great, and will only serve for small vessels. The river abounds more with fish than any other in the peninsula; on that account its banks are in spring and summer the resort of a vast number of bears.

On the twenty-third, in the evening, I left Bolcheretsk, and on the twenty-fifth, arrived at Petropaulowsk, where to my surprize it was still full winter. The sledge-road was good, and a great part of the bay and harbour were still covered with ice. Lieutenants Schwostoff and Davidoff were already preparing their ship for sailing, and expected by the end of April to be able to put to sea. The snow was in some parts tolerably melted, and wild garlick in tolerable plenty had already been gathered for the scorbutic Promüschleniks.

On the first of May, my friends got out into the road, and the next day took their final leave of us with hearty wishes on both sides for a happy re-union at St. Petersburg. Their course was directed to the Kurile islands, to carry into execution the Baron Von Resanoff's plans against the Japanese Settlements. Captain Dwolf too began making his preparations for getting our ship ready for sea, intending to quit the harbour of St. Peter and St. Paul as soon as possible.

CHAPTER XVII.

Voyage from Kamschatska to Ochotsk.—Short Description of the latter Place.—Journey from Ochotsk to Jakutsk.—Remarkable Occurrences and Geographical Observations.—Names of the different Towns in the Route.—Arrival at Jakutsk.—Catalogue of Plants collected in this Journey.

By the thirteenth of May our ship was ready to sail, and the next day we were out in the open sea on our way to Ochotsk. The weather was very clear and fine, but so intolerably cold that we were obliged to keep on our fur clothing. For some days we had very little wind: it was not till the nineteenth, that a brisk gale from the north-west sprung up. An uncommon large whale, the body of which was larger than the ship itself, lay almost at the surface of the water, but was not perceived by any one on board till the moment when the ship, which was in full sail, was almost upon him, so that it was impossible to prevent its striking against him. We were thus placed in the most imminent danger, as this gigantic creature setting up its back raised the ship three feet at least out of the water. The masts reeled, and the sails fell altogether, while we who were below all sprang instantly upon the deck, concluding that we had struck upon some rock: instead of this, we saw the monster sailing off with the utmost gravity and solemnity. Captain Dwolf applied immediately to the pumps

to examine whether or not the vessel had received any damage from the shock, but we found that very happily it had escaped entirely uninjured.

On the twenty-second of May, the second and third of the Kurile islands were in view, and the following day we passed with a fresh-east wind the spacious channel of thirty sea-miles over between the third and fourth island. In the afternoon, favoured by the wind, and by a very strong sea-current, we arrived happily in the sea of Ochotsk, and saw in the north-east a high insulated peak, called Alaïd, which lies not far from the channel that separates Lopatka, the southernmost promontory of Kamschatka, from the first of the Kurile islands. This is a steep rock which rises out of the sea, and to which a wonderful tradition is attached by the Kamschadales. They say that it once stood very near Opalskaia Sopka, a peak in the neighbourhood of Bolscheretsk, but that these two great hills lived in a state of constant contention with each other, till at length the prudent Alaïd, wearied with such perpetual strife, took the resolution of removing far away from all other hills, and fixing its abode in the midst of the sea.

The variable weather we now had, occasioned us to proceed very slowly, but on the second of June, about noon, we were only seventy sea-miles from Ochotsk, so that if the wind was in any degree favourable, we hoped to be able the next day to run into the harbour.

The seamen do not like the idea of approaching a harbour in the fore part of the day, nor ever reckon in such a case upon

the wind continuing favourable: probably this arises from the experience every one may have had how often their hopes are deceived. In this instance we had a striking example of the little stability of the hopes we entertained. In the afternoon our course was most unexpectedly arrested by the appearance of vast fields of ice in a north-westerly direction: this compelled us to shape our course off from the land the whole night through, and gain the open sea as much as possible. To enter into a particular detail of the mortifications we now experienced, would be tedious to the reader; I will only therefore say that we were kept till the fourteenth of June, at the distance of between thirty and forty sea-miles from the entrance to the harbour of Ochotsk, without being able, on account of the quantity of ice, to attempt running into it. The greatest part of this time the weather was extremely foggy, and the cold was so great, that the rigging of our vessel was covered with a crust of ice. Under these circumstances it was not till the fifteenth that we could approach the harbour: having then taken a pilot on board, without which it is not safe to attempt the passage, as the sands are perpetually shifting, about noon we entered it, when we were informed that it had only been cleared of the ice three days.

Here it was that I learnt as the first and principal news related to us on our arriving the death of the Baron Von Resanoff. He had died in the month of March at Krasnojarsk, in his way to St. Petersburgh. Thus he failed in living to see the numerous plans he had formed upon his late voyage carried into execution. I have already mentioned that his death was occasioned by a fall from his horse.

Ochotsk lies on a small, flat, sandy neck of land, between two and three versts in length, washed on one side by the river Ochota, and on the other by the sea. Opposite to the extreme point of this neck of land another river, the Kuchtui, falls into the Ochota, and both form the mouth of a harbour, which is shallow, and will only admit vessels that require a draught of not more than eight feet water. It is besides, from the ruggedness of the climate, not open above three months in the year, from the middle of June to the middle of September.

Notwithstanding that the government has often had the coast southwards from Ochotsk as far as Udskoi Ostrog, accurately examined, to discover, if possible, some better harbour, none has yet been found which seemed to promise answering the end proposed, and which could claim a preference over Ochotsk. Near the latter tolerably good timber for ship-building is to be procured; the rivers abound with fish, and the communication with Jakutsk, although difficult, is easier than it would be from any other part of the coast.

The situation of the dwelling-houses is unhealthy, and is only chosen for the convenience of loading and unloading goods from the ships. The water of the Ochota is only drinkable at the ebb; at the flow of the tide it is very salt. The inhabitants, however, pay no attention to this circumstance, but fetch it for use only at the moment they want it, so that in few houses is a glass of good water, or a dish of unsalted tea to be procured. The coast is scarcely ever free from a moist fog, which, together with the bad water, and the almost entire fish diet, are the principal causes of the unhealthiness of the place, and par-

ticularly of the scurvy so prevalent here. From the low situation of the houses, which stand but little above the level of the sea, they are in danger, in the case of very high tides, which sometimes occur, of being overflowed. This happened in the year 1801, when a part of the town was overthrown by the waves, and the whole would probably have been swallowed up but for a sudden change of wind, which in a few moments diminished very considerably the force of the waves. The dwelling-houses are small and built of wood, differing very little in their size and construction from those at Kamschatka. The population is estimated at about two thousand souls.

The moment we land our ears are assailed with a rattling of irons from the numerous criminals and exiles who are employed at work in various ways, under the guard of the soldiery. The horrible physiognomy of these people, on which their title of criminals is most forcibly impressed, though not agreeable, yet cannot fail of attracting the attention. They are a collection of wretches who have perhaps, more than once, deserved the wheel; murderers, incendiaries, street and highway robbers, some branded, others with their noses slit, marks of the deeds of horror which have brought them to such a state.

Among the principal buildings at Ochotsk, the Admiralty, and the docks for ship-building, are to be particularly distinguished; the keeping them up costs, at least, four hundred thousand roubles annually. The greater part of this expense might be spared, if the vessels, necessary for navigating these seas, with their stores, were sent from Europe by water. A small ship of two hundred tons, which would cost at Cronstadt

or Archangel, from fifteen to twenty thousand roubles, built of excellent wood, with excellent rigging, at Ochotsk would cost not less than seventy or eighty thousand roubles, and be built of indifferent wood, with very indifferent rigging. Larch-wood for ship-building, is cut down along the river Urak, thirty versts from Ochotsk. The transport of a single anchor formerly cost several thousand roubles; in latter years, therefore, an anchor-smith has been established here, and several other skilful mechanics, as locksmiths, carpenters, &c. Bar-iron is also brought by horses from Jakutsk to be worked upon the spot, which is a saving of nearly half the former expense.

The magazines for storing up provisions and ammunition for the troops, here and at Kamschatka, are new, spacious, and well-kept. The church is old and fallen very much to decay. About half way between Ochotsk and the river Urak, are salt-works, from which, during the winter, about two thousand pud of salt is procured, a part of which is sent to Kamschatka for the use of the soldiery.

On the left bank of the Ochota, at the distance of five versts, lies Bulgin, a place the environs of which are tolerably pleasant, and as fertile as the general coldness will permit. Here is a hospital, which is well regulated and kept; near it are several gardens, yielding cabbages, turnips and potatoes, though but of a middling kind. The country is much more healthy on this side of the river than on the right bank, and a plan has therefore been drawn up for removing the settlement hither. Several merchants and officers of the government pass the winter here: Ochotsk is little inhabited, except in the summer, when

ships are perpetually coming and going with merchandize to and from the harbour. In these months, the neck of land on which the town stands, displays a large assemblage of all sorts of wares and provisions for and from Kamschatka, the Aleutian Islands, and America; it resembles in some sort a fair, frequented by the ships that are coming and going, by the shipbuilders, the sailors, the soldiers, and the caravans from Jakutsk. The latter come in numbers about the end of June, and bring on horses, to the number perhaps of from six to eight thousand, provisions, ammunition, brandy, and all kinds of wares and goods necessary for the settlements on the other side the sea of Ochotsk. Every horse carries a weight of from five to six pud, and the proprietor is paid by the crown for the transport thirty roubles, but by the Kamschadales forty. How much soever it may appear as if this transport must be of great advantage to the people of Jakutsk, the contrary is the case. Their only wealth consists in their number of horses, and in the latter years thousands of them have been carried off by the murrain.

The Russio-American Company play a great part at Ochotsk, and build ships from time to time for the purpose of carrying on their trade to Kamschatka and America. It would undoubtedly be much more advantageous to them if they would send the ships necessary for their trade from Cronstadt with the wares wanted for their colonies.

The country about Ochotsk, particularly the Mariakanian-hills, presents abundant matter for mineralogical and geological observation. But how much soever I could have wished to

study both these objects, as well as those that it affords in animated nature, I was obliged to restrain my curiosity, and make it my principal business to prepare for my journey to Europe. It was no small task to arrange the objects I had brought with me from America for a land journey of ten thousand versts; to pack them in chests, and sew leather over them, and to make provision for the number of horses necessary to carry them.

The journey by land from Ochotsk to Jakutsk has many difficulties of a kind peculiar to itself. This extent of country, which stretches to near a thousand versts, is interspersed with bogs and morasses, with rapid forest streams, with considerable rivers without ferries, with thick and almost impenetrable forests; and only here and there, after several days journey, is a hut to be found; provision therefore must be made for all the necessaries wanted by the way before setting out. This route cannot be travelled in summer, in any other way than with horses, and in winter only with dogs or rein-deer; and as so large a portion is through a wild and desolate country, a tent and bed must be provided: the latter commonly consists of two or three bear-skins. The traveller must also be furnished with provisions for several weeks, with implements for cooking, with axes for cutting wood, arms for security, a tinder-box, tobacco to refresh and enliven the Jakutschians, and many other objects of daily necessity.

From the friendly recommendation of the Baron Von Resanoff, the steward of the Russio-American Company, M. Petroff, received Captain Dwolf and myself in the most kind and hospitable manner. He made all possible efforts, at the earnest

entreaty of my friend, to hasten our departure, and laid an embargo for this purpose on the horses which had come with the first caravans this spring, though they were as yet but imperfectly rested. Captain Dwolf was extremely anxious to reach St. Petersburgh in the autumn of the present year, that he might make an end of his business, and go off from thence to America. In consequence of the efforts employed, all things were ready for his departure by the twenty-first of June, and we separated with the warmest assurances of friendship and esteem on both sides.

I cannot pass over, in silence, a very affecting scene which took place just before his departure. The three Aleutians whom I have mentioned as serving in the capacity of sailors on board our ship, came to Captain Dwolf, and throwing themselves at his feet, with tears streaming down their cheeks, earnestly entreated him to take them with him to his native country. "We will be no expense to you," they added: "we ask only for a bit of bread and a little fish; we will follow your horses, and even if we must run after them ever so great a length of way, we had rather go with you than venture home to our own islands." Captain Dwolf was extremely concerned that it was impossible for him to comply with their request.

While M. Petroff was attending to things being got ready for my departure, the disagreeable intelligence was brought, that seven of the worst among the convicts, who, with a number of others, were employed under a guard, in felling timber in a neighbouring forest, had made their escape. The Commandant of the harbour, Captain Bucharin, immediately sent out

a strong party of Cossacks on horseback to retake the criminals, if possible, and to protect the caravans that might be upon the road, which these wretches would be very likely to attack. M. Petroff in the meantime had entered into a written agreement with some Jakutschians, who were known to him, to transport me and my baggage to Jakutsk in twenty, or at the utmost twenty-two days: Captain Bucharin was likewise so good as to let me have a Cossack for a guard. Thirteen horses were required to carry all my boxes and chests, with my tent, provisions, and other necessaries. But that I might travel with the greater ease; that I might be able to relieve my horses sometimes, and avoid over-fatiguing them; that I might not be liable to be thrown into embarrassment by the sickness of a horse, or by meeting with any accident, I followed the advice of experienced people, and hired double the number I wanted. I paid twelve roubles for each; but as these horses are often obliged to return to Jakutsk without any loading, later, in the year they may not unfrequently be hired for only six.

On the twenty-fifth of June every thing was ready for my departure. I expected the arrival of my horses with impatience, but as they were grazing on the other side of the river, I was obliged to wait for the ebb before they could be brought over, and it was not till five in the afternoon that the water was low enough for them to swim across. It was dark therefore before they were loaded, and I was able to set out.

After a course of twenty versts we reached some huts, which have the name of Uglia Sawoda, the charcoal manufactory,

where we were to stop for the night. The weather was foggy and cold, so that I got a fire lighted while the people were setting up my tent, and intended to warm myself with a dish of tea and a glass of punch: the latter, however, I was obliged to forego, for on examination I found, to my sorrow, that in packing my things at Ochotsk, the little provision of brandy I had made was left behind. Rather than suffer the delay which the sending back for it must have occasioned, I resolved to proceed on my journey without this cordial.

The following morning at ten o'clock we set out again. The country was flat, intersected by many little streams, and varied by woods of larch, fir, and birch. Here and there were huts belonging to some Jakutschians and invalid soldiers, who had chosen the spot as their place of residence. The first are not, like the Kamschadales, compelled to a severe feudal service: they live free, though poor, supporting themselves by breeding cattle, by the chace, and by fishing. The only tribute they pay to the Crown is sixty squirrel skins of a species of grey squirrel, which are here particularly good in their quality. A single skin is worth from twenty to three-and-twenty copeks.

Towards noon we reached some habitations which have the name of Medwescha Golowa, bears' heads. This is commonly the first day's journey from Ochotsk. In several of the houses, or huts, very good milk may be procured. In the evening, after travelling about forty versts farther, we came to a picturesque spot in the midst of a wood, called by the Jakutschians, Meta: here an invalid has fixed his abode. We determined

to take up our night-quarters in this place, and we procured an excellent regale of milk from the neighbouring habitation.

Early in the morning our two Jakutschians had both absented themselves, and left me and my Cossack in the utmost embarrassment, as we knew not what was the occasion of their absence, and some time elapsed without our seeing any thing of them. The case was this. The day's journeys are regulated by the places where feed is to be procured for the horses, or by the *grazing places*, as they may be called, which answer entirely to the post-stations. When the caravan arrives in the evening at one of these places, the horses are unloaded, and turned loose to feed. The Jakutschians watch the horses by turns the whole night through; that is to say, the person watching must go round every hour to see that the horses are all safe. But as the meadow in which they are left to feed is pretty extensive, and the watchman, being fatigued, not unfrequently falls asleep in the interval of going his rounds, it often happens that single horses, or indeed sometimes the whole troop, are dispersed and stray about. When a stray horse is happily taken again, he has a bridle thrown over him, or is driven into a little pen, which is commonly found ready prepared for this purpose at all the *grazing places* where the caravans are accustomed to stop. It will perhaps be said, why do not the Jakutschians follow the European custom of tying the two fore-legs of the horses together, which would render their straying to any distance impossible, but a good reason may be given why this is inexpedient: there is constant reason to apprehend robbers by night, and nothing could be more easy than to catch the horses, and carry them away, if they were thus shackled; left at liberty they are not easily caught.

It was in pursuit of some of our horses which had strayed away during the night that our Jakutschians had absented themselves, and it was not till after long expectation that they at length returned with them: all things were then repacked, and we proceeded forwards.

After travelling fifteen versts in a thick fog, we arrived at Torotolom, a very rapid forest stream, which we were to wade through. From the dry weather which had continued for some time, it was not now so deep as usual, and the water only reached to the horses' bellies: in rainy weather the caravans are sometimes detained here for a week together, by the impossibility of passing the stream. The forests were in high beauty, and displayed an agreeable variety of shades from the firs, the larches, the planes, the birch-trees, the alders, and the hazlenuts. We were so fortunate as to find many boggy places, which at some times are scarcely passable, now quite dry. This country was not so wholly destitute of animated objects as what we had passed on the former days. We saw two bears, and I killed a ptarmigan in its summer plumage, and a mew. Towards evening we learnt from a caravan which we met, that one of the criminals who had recently escaped from Ochotsk had been retaken by the Cossacks that were sent in pursuit of them, and that the rest were dispersed and put to flight. After a day's journey of fifty versts, we stopped for the night in a narrow valley, surrounded by naked rocks, in which was excellent feed for the cattle. Another valley near was so covered with ice and snow, and made the surrounding country so cold, that to our great satisfaction we passed the night without being troubled with the musquitoes. In the evening I enjoyed my

soup made of the two birds which I had killed, without eating any of these troublesome insects with it.

The next morning, having struck our tent, and made a good breakfast, we loaded our horses, and set forwards again on our way, which lay through thick forests winding between hills of a pretty considerable heighth. When we had proceeded about ten versts, we crossed, on a low part, the chain of hills called Plutnei Chrebta, the rascals' hills, because they are the common place of resort of the criminals that escape every year from Ochotsk. One of those recently escaped had been taken a few days before on this very spot; the rest were in consequence so much alarmed, that they were afraid of appearing, and we fortunately passed without being molested by them. Among several other large streams which are sometimes dangerous, we this day crossed the Borokskoi, and twice the Magilnoibrod. We travelled till late at night, since we found on almost all the *grazing-places* caravans going to Ochotsk already encamped, and our guides thought it better to proceed farther, than to stop for the night with our small caravan among such numerous ones. We had travelled seventy versts before we found a convenient place for stopping, and then pitched our tent not far from a small caravan. Though the weather was so hot as to be somewhat fatiguing to us, we found our advantage in it, many streams being almost dry, which cannot in wet weather be crossed without difficulty and danger.

According to the report of our guides, we were here only at the distance of ten versts from some magazines and buildings called Uraskoe Plotbischtscha, which are inhabited by a party of

Cossacks. They are receptacles for the flour, the ammunition, and other objects destined for Ochotsk and Kamschatka, which on account of the loss of horses, or from being too late in the year to reach Ochotsk, would without some such provision be wholly lost, as they must be left to spoil on the road, the whole winter through. It is the business of the Cossacks stationed there to collect such articles, and guard them through the winter.

On the twenty-ninth, one of the Jakutschians was again out very early in the morning in search of some of the horses which had strayed farther than usual. In about two hours and a half he returned, made a great cross upon his breast, and said that God had given him back the horses. We set out on our course for the day later than usual, and were much incommoded by the heat of the sun. At first we travelled over a low flat country, where were scattered little woods of birch and larch of particular beauty. We passed several little streams, and some bogs, and morasses, where the snow and ice were only recently melted; indeed, large spots of both were still to be seen.

We passed Plobischtscha without stopping there. Towards evening we met the post from Jakutsk, which had been already sixteen days in its route. He told us that fifteen versts off a robber had come out upon him from a little thicket, but seeing who he was, called to his associates, "*Comrades, there is nothing to be got here, let the post go on unmolested.*" On receiving this intelligence, my Cossack and I got our fire-arms in readiness, and proceeded on our way entirely unconcerned, since we knew that these marauders could not as yet be provided with arms. After

a day's journey of forty-five versts, we arrived about sun-set exactly at the spot where the robber had been seen by the post, and pitched our tent two or three versts out of the high caravan-road, in a place where there was but very meagre fare for the horses. As we had some reason to fear an attack, all our baggage was piled directly before the tent, and it was agreed that we, being four persons, should watch alternately the night through, and give the alarm that we might stand on the defensive if the least reason for apprehension should appear. From some little clouds that were gathering in the evening, our Jakutschians prognosticated rain, and some actually fell in the night.

The next morning we approached the Urak mountains, in which rises a river of the same name, that runs into the sea of Ochotsk. The part which we were to ascend is not very steep, but the country presented a greater variety than any we had yet traversed. From a caravan which we met we received the consolatory information that the Cossacks had the night before taken another of the fugitive convicts from Ochotsk. A few hours after, having passed the Urak mountains, we arrived at a pleasant little valley, in which was a small lake three or four versts in circumference; the Cossack party which had retaken the fugitive were now resting themselves on its banks. To satisfy my curiosity, I approached them, and examined the physiognomy of the criminal. Never did I see a stronger expression of all that was horrible and revolting in a countenance; his eyes were small, and deep sunk in his head, he had a large projecting forehead, high cheek-bones, coal-black hair hanging long and lank from his head, a long beard, and his clothes were all in tatters; every thing about him gave the idea of a wretch capable of committing every sort of crime.

Towards evening, after another day's journey of forty-five versts, we reached Judomskoi Krest, the first great station from Ochotsk. This place consists of some houses and a little chapel, and lies upon the river Judoma. In dry seasons this river has so little water, that a man and horse can cross it very easily, but in wet seasons it is very deep and broad; it falls into the Maya, which afterwards unites itself with the Aldan, the latter being one of the tributary streams to the Lena. Four workmen and an overseer take care of the ferry: three boats are kept here, in which all crown goods are carried over free, but merchants pay ten copeks for every horse-load of merchandise, a load consisting of about five pud. These people live in the greatest poverty: there is so little feed for cattle in the neighbourhood, that they cannot keep either cow or horse; no garden vegetables can be cultivated, and the river produces very little fish; bread and water are almost their sole nourishment.

As the feed on the other side of the river was not better than on this, we deferred crossing it till the next day, and took up our night quarters where we were. A part of the Cossack rangers had stationed themselves along the bank of the river, that the robbers might not get possession of the boats in the night, and pass the river by stealth. Early on the following morning all our baggage was stowed in one of the boats, but the horses were left to swim over: the stream was so strong that they were carried along by it, and landed about two versts farther down on the opposite bank. On this and many other occasions I had reason to admire very much the dexterity of the Jakutschian horses in swimming.

When we had gone about twenty versts farther, through a flat,

open, morassy country, with very little wood, the Jakutschians begged of me to allow them a day of rest, as their horses had been very scantily fed for the last two days, and we were now in a spot where there was a great abundance of grass. I consented very willingly, and employed my time in adding some very beautiful plants to my collection. The place where we stopped was boggy, and though one of excellent cheer for the horses, by no means particularly agreeable to ourselves, as we were exceedingly annoyed by an almost incredible number of gnats. This made the horses keep very much about the tent, as they had learnt from experience that the smoke from the fire, which is usually kept up all the night near the tent, diminishes the number of gnats very much.

At sunrise the horses were again saddled, and we proceeded towards a chain of high and naked hills, enclosing a narrow valley, along which lay our route. Through the midst of this valley winds the river Okatschan, and from the appearance, I should guess that the valley is often overflowed by it, since it was filled with loose stones, which were very troublesome to the horses. We had not made any considerable progress, when another valley opened upon us, through which flows the river Lanku, till it here joins the Okatschan. This country presented a very remarkable spectacle which surprized me much. The part of the valley of Okatschan in which we now were, as well as that of Lanku, over which our eyes wandered, were to a distance of several versts covered with ice three feet thick, while amid this wintry scene rose at intervals tall willow-trees covered with leaves and flowers.

On this and some former days I had seen near the road many dead horses, which upon inquiry I found had been carried off by a murrain. An abscess or swelling came on suddenly, more commonly in the head than in any other part: they began to shiver, and died in half a day at the farthest: some went off in an hour. This kind of murrain is only observable in the hottest months, July and August, and seems first to have broke out in the year 1804; it raged then so furiously, that among a caravan of eighty horses only ten escaped it*.

As the Jakutschians did not at first understand the nature of this disease, and as they like horse-flesh, they thought it a pity that so much good food should be lost, and therefore ate some of the horses that had died in this way. Most of those who made this experiment died the first or second day after; a few lingered on for a fortnight. A very few who escaped with life had in the sequel terrible swellings in the upper-lip and cheeks, which made great holes in the face, and disfigured them exceedingly. In the following year, 1805, not one horse died in this way, but in 1806 the disease broke out again, and a great many were lost. In the present year, 1807, it had appeared anew, but most probably the circumstance was not yet known either at Ochotsk or at Jakutsk, as the Jakutschians assured me that the government, when they know of its being prevalent, always send out people to burn the dead horses.

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* The Jakutschians assert that not only the horses, but also cows, rein-deer, bears, and other animals, are afflicted with this murrain; and the assertion appears to me well founded. The same disease is known in Europe, where it has the name of the *spleen-sickness*, or the *carbuncle-sickness*; and many different sorts of animals are attacked by it.

After travelling forty versts we pitched our tent by the side of the river Okatschan, and the next day again followed the course of the same river, crossing it in its windings three different times. The valley contracted itself by degrees as we proceeded onwards, and at the end of about thirty versts we found ourselves at the foot of a very high steep hill, which has the name among the Jakutschians of Mosockotlo or Mosootlo. I do not remember ever to have seen so totally barren and naked a spot; from the uppermost point to the very foot not the least trace of a tree or plant of any kind was to be seen; it resembled only a vast mass of rubbish, with numbers of loose stones scattered over it. In the valley, which is very stony, and presents a most barren and dreary aspect, I observed schistus, granite, porphyry, and other productions, which seemed to denote original mountains. Nearer to Ochotsk the mountains were calcareous, and not so desert as these, but clothed with woods, which gave them a varied and pleasing aspect. It is true that these mountains have perhaps scarcely more than two feet of earth, and the roots of the crippled trees run horizontally along the surface of the rocky base, so that they have such a scanty hold that they may be easily torn up by the wind. The roots of such trees form a star as it were, shooting out every way, and the trunks rarely measure above a foot in diameter.

About eight versts after we had crossed the mountain of Mosootlo, we again ascended and descended several heights, and came to a lake above three versts in circumference, on which, for the first time since I had left Ochotsk, I saw some wild-ducks. Opposite to the centre of this lake is a separation between two hills, forming a sort of natural door, in passing through which a

sudden transition is experienced from summer to winter. A vast field of ice is spread out, stretching to the length of five or six versts, and not less than four in breadth; it is called Capitanskaia Saseka. In this valley, enclosed on all sides, excepting the door above described, by high hills, the ice never thaws: it is a perfect glacier. It was now in several places four or five feet thick, and from the many refts, through which were flowing little streams, it was impossible to go along and explore it. The cold was so great, that we found our furs absolutely indispensable.

During the latter days' journeys I had frequently observed little bunches of horse-hair tied to the branches of the trees. This I ascribed at first to chance, but from seeing it so frequently repeated I was led to inquire into the reason, when I learnt from my Jakutschians, that this is a means made use of to spite the devil, since he is thus deprived of all power over the horses.

This day we travelled fifty versts, and passed the night at a place called by the Jakutschians Tastolon, and by the Russians Kamenoe Pole, that is to say, *Stone-fields*. From the name it may be supposed that it afforded very meagre fare for our cattle. The next morning my Jakutschians informed me that there was a nearer way than what is usually taken by the caravans, abounding with grass, but which they avoid because it lies over a high steep mountain: it was proposed by them that we should take it. To this I readily assented, and we accordingly crossed Kurtat Urach, as it is called by the Jakutschians, Bremoi Retschka Chrebot by the Russians. The road is extremely up and down hill, but presents

an agreeable variety with good meadows and pretty woods. After crossing the principal hill, and going about ten versts, we came again to the usual caravan road in a cold ice valley, called Kamenoe Pole Saseka: through it flows a small stream, which afterwards joins the Antscha, which latter river joins the Allach Juni at a place of the same name, where there is a government ferry.

About forty versts farther my Jakutschians carried me to a place not far from the road, where there was a very large cross, with a circle of stones stuck round it. They repeated constantly the word *Dimann*, but as they could not make me understand them, I was obliged to apply to my Cossack for an explanation, when he told me that an enormous animal was buried there, the length of which was indicated exactly by the stones. I measured the enclosure, and found it thirty-five feet long. Two of these animals I was informed had existed twenty years before, one of which was lost as it was out grazing, the other died on this spot, as it was travelling from Jakutsk to Ochotsk: my informants said that they were very large graminivorous animals with very long trunks, by means of which they fed themselves; that they could carry a weight of thirty pud with the utmost ease; that nothing more was necessary for loading them but to make them go down on their knees, and this was easily done by striking them with a little stick on the fore legs. My mind immediately wandered to the traditions respecting the existence of the mammoth, when I was recalled from my reveries by hearing the name of *Werblud**, which informed me that this wonder-

* The Russian name for a camel.

ful creature was no other than a camel, the long neck of which, with true poetical licence, was converted into a trunk, while its dimensions were only a good deal more than doubled.

In the afternoon we passed some wooded mountains, one of which was all in flames. The Jakutschians had probably made a fire at the foot of some old tree, which had been by this means set on fire, and had communicated to the whole forest. In the latter days of our journey we saw several hills, which, through the negligence of the people, had experienced similar conflagrations. This was the first day since our leaving Ochotsk that we had not met with any caravan. After travelling fifty versts, the tent was pitched for the night near Dulschaaschlick, where was excellent feed for our horses.

On the fifth our route lay along the stony valley of the river Antscha; we crossed this stream several times. Some hills which lay in our way were steep, and fatiguing to ascend. The most disagreeable occurrence of the day was that we passed a burning forest, in the fear alike of being suffocated with the smoke, and roasted to death. We met several caravans and a numerous herd of cattle, which were going to Ochotsk. From the people belonging to the caravans, we received the melancholy information that the small-pox had broken out with great violence at Allach Juni, and in several other parts near the Aldan river; this was a calamity which had not been experienced for several years. My two Jakutschians, who had neither of them had the small-pox, were exceedingly alarmed, and earnestly entreated me

to permit them to carry me the *new* way as it is called, that is a projected *new* way, since they should then avoid all the places which would be dangerous to them. I thought their request so reasonable, that I made no hesitation in complying with it, though it would carry me a circuit of a hundred and twenty versts out of my way.

Before the evening, therefore, we quitted the great caravan road, and turned towards the river Allach Juni, over which, in the road we had quitted, there is a government ferry. For want of such a convenience we were obliged to swim our horses over; the stream was so rapid, that we were in no small danger of losing some of our horses with all their load. We travelled this day forty versts, and stopped for the night in a wide, open, and moist valley, Allach Junsky Jällan, which, in rainy weather, I should suppose scarcely passable. The next day, after crossing some insignificant hills, we came to the river Kinkuich, which rushes through a narrow valley. In the bed of the river I found schistus and quartz: part of the latter was in little groups of crystals. We travelled fifteen or twenty versts in the bed of this river, which served as a road through the valley. The banks are partly flat and shaded with fine trees, partly high, and approaching so near to each other, that hanging over the stream, they form very picturesque scenery. Farther on we ascended a gently rising slope, whence we descended to the valley of Achara, watered by a river of the same name, which flows into the Aldan. Some of the hills are rendered naked by fire, others are prettily wooded. Instead of larches, here again, after a long cessation, we came to firs. Our day's

journey was sixty versts, and we stopped for the night in a boggy wood, where the number of gnats was absolutely inconceivable.

The valley of Achara abounds in firs of different kinds, juniper bushes, and many plants which I had never observed before. This formed an agreeable variety to me, and the way was besides enlivened by several caravans, who, like ourselves, had taken this route to avoid the small-pox. As my guides assured me that on the following day we should have very indifferent roads, and should scarcely find any feed for the horses, I consented to stop after we had travelled forty versts, that the horses might have a good meal to fortify them against the approaching meagre fare.

By day-break we again set forwards, and I found, very contrary to my expectations, a good road and excellent grazing. The truth was, as may easily be discerned, that my Jakutschians had a mind to spare their horses the day before, by taking only a short day's journey. We travelled thirty versts before we quitted the fertile valley of Achara; we then ascended a high morassy thickly wooded hill, Acharinskaia Chrebta, through which we were obliged to make our way with the ax constantly in our hands: this was indeed a *new* way. As night closed in, we were obliged to stop in a dreary desolate region, where was neither food nor water for our cattle.

Early in the morning of the ninth of July, the tent was struck, and we were glad to get away from so inhospitable a spot. After some hours we came to a little stream, Elkakan

Bacha, or the fountain of Elkakan, by the side of which we stopped awhile to refresh ourselves with tea, and recruit the empty stomachs of our poor cavalry. The rest of the day was spent in going over hills with thick forests, and vallies with deep morasses, so that we found this *new* way yet more disagreeable than the old, where we had to slide over ice-fields, to wade through rivers, and stumble over loose stones. Towards evening we saw before us a high ridge of mountain, called Loochlohr, at the foot of which, my Jakutschians told me, was the river Junikan, which we should reach before the close of day. This we did in effect, after a tedious day's journey of fifty versts, but not till some time after sun-set.

We passed the night by the side of the river Junikan: this river is often so swelled, even by very moderate rains, that it cannot be passed for a week together. It was now, notwithstanding that we had scarcely had any rain for three weeks, so deep, that the horses in crossing it were above their bellies in the water. We did not set out very early this day, as we were only thirty versts from the river Aldan, which was to be the boundary of our days journey. The country from Loochlohr to the Aldan is flat and morassy, affording very rich pasture for the horses.

In the afternoon we reached the right bank of the Aldan, a large river which is here more than a verst in breadth. I had reason to expect that we should find a regular ferry as at Judomskoe Krest, the Jakutschians having talked much of the ferry of Notara, a place which lies on the left bank of this river. We therefore began immediately upon our arrival to announce

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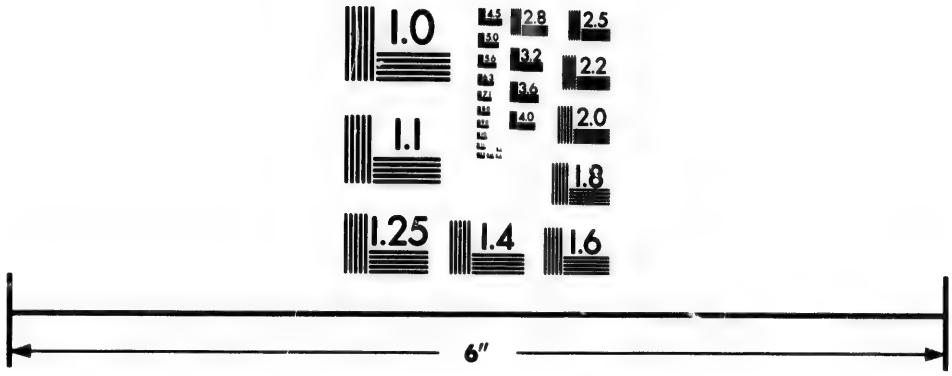

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ourselves by hallooing with all our might, by firing guns and making a great fire. All was however in vain, and the Jakutschians were about to swim the horses with their loads over, when my Cossack, who was a thoughtful intelligent man, proposed making a raft, on which the Jakutschians could cross the river, and return with a boat to carry us and our baggage. The work was immediately set about: some dry trunks of trees, which we found, were bound together, and two branches made into a sort of oars. With this frail conveyance the Jakutschians trusted themselves to the stream, and, before the day was entirely closed in, returned with a boat, into which ourselves and our luggage were immediately packed, and all soon arrived in safety on the other side. We now learnt that, though the boats were usually here, because it was the best place for crossing, the habitations, which we expected to find, were ten versts farther up the river. I left my Jakutschians therefore with the baggage and horses, and went, accompanied by my Cossack, to the place in question, very desirous to obtain some farther acquaintance with the inhabitants of these parts.

I found in a small hut an old man of seventy-five, by name Kapitohn: he seemed to be very industrious, and to live perfectly contented with his family: they were not indeed very numerous. His riches consisted, like most of the Jakutschians, in considerable herds of cattle and horses: the flesh and milk of these, with the fish that are caught in considerable quantities in the river about spring and autumn, form their principal objects of sustenance. Although the Jakutschians have long been very much connected with the Russians, they have acquired less of

their language, manners, and customs, than the more remote Kamschadales and Aleutians. They pay a small tribute to the crown, and live undisturbed among their families; their weapons consist, even now, as well as formerly, chiefly of bows and arrows. The chace, and breeding cattle and horses, are their great occupations: they drink the milk of their mares, and eat horse-flesh, as dainties. Some of the Jakutschians have a hundred, or even a hundred and fifty horses.

From my aged host I learnt, that by going down the river a hundred and twenty versts, I might reach Massapchinskoe Periwos, the usual road from Ochotsk, in twenty-four hours, whence, with post horses, I might arrive at Jakutsk in three or four days. Tired of my former mode of travelling, after the fashion of the caravans, and in the conviction that in this way I should attain the end of my journey much quicker and more at my ease, I gladly embraced the offer of the good Kapitohn, to let me have his boat and men to carry me to the place proposed; and I ordered my Jakutschians to proceed with the baggage to Jakutsk, where they would find me waiting to receive it at the house of the agent of the Russio-American Company. I could with the greater confidence and security trust my baggage to them, as a written contract had been made with them at Ochotsk, by forfeiting which they would have injured themselves as much as me. In fact, three days after my own arrival at Jakutsk, I received every thing in perfect safety.

My bed, which consisted of a bear's-skin, some provisions, a tea kettle, and other necessaries, being put on board the canoe, I set off with my Cossack and two Jakutschians. The canoes

of these people are very flat, and carried to a point at both ends. They consist of a skeleton in the manner of the Aleutian baidarkas, covered over with dried bark of birch-trees fastened well together, the seams being pitched over, so that they are perfectly water-tight. They are quite open, not, like the baidarkas, enclosed except the hole for the body. Such canoes are very light, and suited to going rapidly, but they are retarded somewhat by not being always exactly balanced. The oars have the strongest resemblance to those of Oonalashka.

After so wearisome and tedious a caravan journey, I found this jaunt by water extremely pleasant. The banks of the Aldan are agreeably varied; they are for the most part somewhat elevated, and pleasingly shaded with willows, birch, and larches. The soil of the banks is a sort of argillaceous sandstone; among the loose stones I found some which were a mixture of fine grained granite and schistus. Thirty-five versts from Notara, a stream of the same name falls into the left bank of the Aldan, and ten versts farther is an island called Jagodowa Ostrow, or the Berry-island, from the number of berries of different kinds, particularly strawberries, currants, and whortleberries that it produces. Soon after passing this island, on the right bank of the river, rises the towering rock Nosowoe Kamen, and near it the mountain Nosowoia Gora, while on the left bank is seen the mountain Salaginski Bereg.

Soon after sun-set we reached Ochojanskaia Ostrow, where we stopped to drink tea, and take some other refreshment. The Jakutschians had brought some fishing-nets with them,

which they now threw, that they might turn our stay here to as much account as possible. These nets were about three feet broad, and a hundred and fifty feet long, made of horse-hair, and very strong, though the thread consisted of only five hairs twisted together. They are spread out in the water by means of willow-rods, and the fish with their fins entangle themselves in them, so that it is impossible to get away. After we had refreshed ourselves, we saw to our great satisfaction some sturgeons and pike drawn out of the river.

Early in the morning on the twelfth, we reached Kerbin, another small Jakutschian village, where I changed both my boat and my rowers. To the people by whom I had hitherto been conducted I gave some tobacco as a parting remembrance, with which they seemed extremely pleased. The banks of the Aldan, consisting partly of high towering rocks, partly of gentle slopes, offer a pleasing variety, and present some very beautiful landscapes, which only want houses and animated objects to enliven them. I took a slight sketch of the place where we breakfasted; a high rock on the opposite bank my conductors called Padjesobut. Two or three versts farther I was delighted with a very picturesque spot, called Tschelobscha: in the high rock was an opening like a gateway, which led to a cavern that ran a great way under the rock; and the river dividing itself into different branches, formed a number of islands, several of which were inhabited: in some of them are ponds and streams, into which the fish from the river often run. The grass, which grows very luxuriantly, feeds the abundant herds of the Jakutschians who reside here. On the right bank of the river are several strata of excellent sandstone.

In the afternoon I visited the summer habitation of a rich Jakutschian. He with his family inhabited a spacious hut of a conical form, somewhat flattened at the top: it might be about eighteen feet in circumference, and consisted of a skeleton covered over with the bark of birch-trees. The arrival of a stranger was a thing which could not be expected by any one, and I was therefore the more surprized to observe here a cleanliness which I had sought in vain in the poor habitations at Kerbin. I was particularly struck with the great variety of uses to which the bark of the birch-tree is put among these people. Besides being used to cover their boats and houses, they make of it drinking-cups, milk-pails, and vessels for carrying water: the divisions in the inside of the houses are also made of this bark; it is even converted into screens and curtains for the bed, which are ornamented in various ways. I was shewn some of this bark embroidered with horse-hair, upon which a Jakutschian woman had been occupying herself for a whole year. To make the bark more durable, as well as pliable, so that it may be sewn together, it must lie for a whole day in water that has been boiled, or perhaps must be prepared still farther; but of this I could not make myself sure; and the Jakutschians assured me that when it has undergone this process, it will last sixty or seventy years. A carpet, or hangings for the wall, or bed-furniture of this work, are handed down from one generation to another as family inheritances.

It is indeed very curious to observe how much among uncultivated nations one simple object, with which they are supplied by nature, administers to the greatest part of their necessities. To several of the South-Sea islanders the bamboo-cane is every

thing. The Aleutians, the Eskimaux, and many other nations, exist only by means of the whale and the sea-dog. The Coraks, the Tschutski, the Laplanders, the Samoiedes, and other inhabitants of the northern part of the globe, live almost entirely by their rein-deer, making use even of the moss found in their entrails. To the Burates, the Kirgisians, and other people who inhabit wide wastes and heaths, the sheep is indispensable, serving them as food and clothing, and for making their habitations; while the Jakutschians look to the horse and the birch-tree for satisfying the greater part of their necessities.

Towards evening I reached the great government-ferry over the Aldan, Massapchinskoe Periwos, in the high caravan road. The father of the Cossack whom I had brought with me from Ochotsk was overseer of this ferry, and was exceedingly delighted at the unexpected arrival of his son. He immediately set about entertaining me to the best of his abilities, presenting me with excellent milk, cream, fresh butter, and strawberries, preparing at the same time a wild-duck for my supper. Of this animal, the *anas fusca*, he said there had been unusual numbers upon the river all the year: the inhabitants of Ochotsk, on the contrary, complained very much, that whereas they used formerly to take thousands of them with nets, or knock them down with sticks, they were now regularly diminishing in numbers.

Wearied with constant travelling for so many days, and finding myself tolerably well in this place, where are several houses built after the Russian fashion, I resolved, influenced also by the pleasure I saw that it would give my Cossack and his pa-

rents, to rest here the whole of the thirteenth. A party of soldiers from Jakutsk contributed very much to enliven the place. They had been sent hither because there were in the neighbourhood some fugitive criminals, who rendered the passage of the river dangerous. The Jakutschians of the country were busy in hay-making: they seem to live in great poverty. They readily sold me their bows and arrows for some leaves of tobacco, which they received with such pleasure that I could easily see how scarce this merchandise, now become to them an article of necessity, must be. A cow here commonly costs ten roubles; a good horse with saddle and bridle from seventy to eighty. As the provisions I brought with me from Ochotsk were almost exhausted, I bought a calf of a year old, for which I gave six roubles.

The winter habitations consist of a clay wall, which is boarded over in the inside with thin planks; they are commonly inhabited by only one family: the summer habitations, on the contrary, are the common abode of several families. The sitting-room has a boarded floor, with a free standing chimney in the middle, which has a fire on both sides. In a country where there is no occasion to be sparing of wood, this double fire has a great advantage, as the traveller may at all times find the means of warming himself, and drying his clothes. The cow-stall is immediately by the side of the sitting-room, separated from it only by a door. The horses live the whole year round out in the open air, and I was assured that the colder the weather is, the better they find themselves; they grow thin if they are kept in a warm stable: it is to be observed that the cold here is very commonly at 30°.

Although I was now in the heart of Asia, many traces of European civilization were to be observed. From hence to St. Petersburgh are regular post-stations, at about thirty versts distance from each other. It is to be observed, however, that as far as Jakutsk they are only stations for horses; no carriages are to be procured. I had ordered post-horses to be ready the next morning early, but they did not arrive till the afternoon, and were then carried over the river with my little baggage in a flat-bottomed boat. The horses of the caravans are always made to swim over, though the river is here at all times a verst and half in breadth; they are often carried four or five versts down the stream. If the river be at all swollen, so broad and so rapid does it then become that horses are not unfrequently drowned.

The road for the three first stations from Massapchinskoe Periwos is nearly as bad as from Ochotsk thither. Bogs, morasses, thick forests, mountains, and forest-streams, are all insurmountable obstacles to quick travelling. From thence are dry open plains, and the stations themselves are in much better condition; at most of them milk and cream may be procured, and fish from the ponds, of which there are a great abundance. The heat was very oppressive in the middle of the day, and the number of gnats intolerable; I therefore availed myself rather of the cool of the night for travelling, and rested in the middle of the day.

Near the station of Schirapschinskaia is a salt magazine, from which the Jakutschians supply themselves with salt. Brandy may also be purchased here. Between Tonkolinski and Tubi-

jachtaski I saw something hanging to a tree, which looked not unlike a trough for feeding hogs; but upon inquiry I found that it was the coffin of a child, and that the Jakutschians do not bury their dead, but hang them up in this way to trees.

I did not make a longer stop at any of the stations than was absolutely necessary for changing horses, and on the eighteenth, towards noon, reached the last station, Jakutsk-Jahrmonka, which is only a verst and a half from the banks of the Lena. This river is one of the most considerable in the Russian dominions: its breadth, including all the islands that it forms, is here seven versts. I was carried over with my baggage in a little boat.

About four in the afternoon I approached the town of Jakutsk, on the left bank of the river. The lofty towers and cupolas of the churches give it a handsome appearance at a distance: it lies in latitude sixty-two degrees north. By the shore lay a number of flat-bottomed single-masted vessels, which are here called ships: the same appellation is also given to a sort of covered floats, used in the upper Lena, in the neighbourhood of Wercholensk, made of the trunks of high trees, the inside of which is hollowed out, and used for building houses. The town is inhabited by Jakutschians and Russians: it contains between five and six hundred houses, all built of wood: some are very spacious, and almost all have a court and garden, so that the town altogether occupies a considerable portion of ground. The streets are broad, irregular, and not paved. Some very well built houses only make the others look, by the contrast, more pitiful

and wretched. There are five churches, and a convent of monks. Close by the town are still to be seen some old wooden towers which are the remains of the first fortress built by the Russians at the conquest of the country, for their protection against the Jakutschians. In the spring the town and the islands are sometimes terribly overflowed by the swelling of the river. This was particularly the case about thirty years before, and in the year 1807. Several Jakutschians, and more than a thousand head of cattle, were carried away by the waters, and lost their lives.

I was assured that the cold here in winter, is often from thirty to forty degrees by Reaumur. During the greatest heat of summer the ground is never thawed above two feet deep. The meat froze in the cellars during my stay. In the draw-wells ice generally comes up the whole summer through. The vegetation of the grass is uncommonly strong. The principal sources from which the inhabitants draw their subsistence, are the fur trade and breeding cattle.

In this journey I collected the following plants.

Aconitum ochroleus affin.
Achillea Alpina.
Anemone narcissiflorus.
Anemone sylvestris affin.
Andromeda polyfolia.
Antirrhinum Linaria.
Atragene Alpina.
Aquilegia.
Aster Alpinus sibiricus.
Androsace filiformia.
Artemisia Laciniatæ affin.
Aspidium.
Alnus.
Astragalus Uliginoso affin.
aliæq, species hujus generis.
Arbutus Alpina.
Arbutus Uva Ursi.
Anthericum calyculatiem.
Bartsia pallida.
Betula nana fruticans.

Betula fruticos affin.
Betula Alnus.
Beckmania erucæformis.
Blechnum calophyllum.
Carum simplex.
Campanulæ.
Cacalia hastata.
Carices.
Cinerariæ.
Chrysanthemum arcticum.
Carduus Crispus.
Cornus sanguinea.
Chelidonium majus.
Dianthus.
Drabæ.
Delphinium grandiflorus.
Epilobium.
Erigeron Acre.
Euphrasia Officin.
Festuca.
Fragaria vesca.
Gnaphalium Dioicum.
Gnaphalium Leontopodioides.
Geum intermedium.
Galium Rubioides.
Galium Boreale.
Gentiana Macrophylla.
Gentiana Triflora.
Holcus Borealis.
Hypericum Ascyron.
Hedysarum flor. rubr.
Hedysarum Alpinum.
Inula Brittanica.
Inula Hirta.
Juniperus Sabina.
Juniperus Communis.
Linum Boreale.
Linum perenne.
Ledum Palustre.
Linaria, a new species.
Lysimachia Thyrsiflora.
Lycopodium Annotinum.
Melanthium Sibiricum.
Marchantia Conica.
Mentha Aquatica.
Potentilla Anserina.
Potentilla Fruticosa.
Potentilla Hirta.
Phlox, Sibiricus.
Prenanthes, a new species.
Pyrola Rotundifolia.
Pyrola Secunda.
Pedicularis Verticillata.
Pedicularis Euphrasioides.
Pedicularis Resupinata.
Pedicularis Sceptrum.
Polygonum Viviparum.
Populus Alba.
Populus Balsamifera.
Pinus Cembra.

Pinus Larix.
Pinus Abies.
Platanus Orientalis.
Polytrichum.
Phaca Astragalin, affin.
Primula Sibirica.
Primula, a new species.
Phlomis Tuberosa.
Plantago.
Paris Quadrifolia.
Rubus Chamæmorus.
Ranunculus Aquatilis multifidus.
Ranunculus Pulchellus in udis.
Rubus Arcticus.
Ribes rubrium.
Rhododendron Tauricum.
Rhododendron Chrysanthum.
Rheum.
Salices.
Spirea Lobata.
Spirea Sorbifolium.
Stachys Palustris.
Stachys Sylvatica.
Senecio Saracenicus.
Selinum.
Scutellaria galericulata.
Swertia Perennis.
Sanguisorba Officin.
Sedum.
Stellaria.
Saxifraga Oppositifol.
Serratula Alpina Sibirica.
Scorzonera.
Sonchus Sibiricus.
Sphagnum Capillifol.
Trifolium Lupinaster Rubrum.
Tanacetum Vulgare.
Taraxacum.
Thymus Latifolia Sibiricus.
Trientalis Europæa.
Trollius Asiaticus.
Valeriana Officin.
Veronica Incana.
Veronica Maritima.
Vaccinium Vitis Idæa.
Vaccinium Uliginosum.

CHAPTER XVIII.

Journey from Jakutsk to Irkutsk.—Difficulties attendant upon this Journey.—Description of the principal Places in the Route, Olekma, Witim, Kirenki, Wercholensk, with their Distances from each other.—Remarkable Occurrences.—Plants, Minerals, &c.—Arrival at Katschuk.—The Bratski or Buratians.—Arrival at Irkutsk, and Description of the Place.—Visit to Kiachta.—Journey through Tobolsk, Kasan, and Moscow, to St. Petersburgh.

By advice of the Agent of the Russio-American Company at Jakutsk, I consigned all my chests and larger baggage to a merchant vessel to carry them to Irkutsk, at the usual price of four roubles a pud. I only kept with me my papers, drawings, and a small portmanteau with linen, and was thus in a situation to proceed forwards in the easiest and quickest manner possible.

The distance from Jakutsk to Irkutsk is generally estimated at two thousand five hundred and ninety-nine versts, though, according to some calculations, it is only two thousand four hundred and eighty-six. As however no regular geographical measurement of the country has ever been taken, an error of a hundred versts in such a distance is easily made. The whole way, excepting the last two hundred and seventy versts, is along the beautiful river Lena: there are regular post-stations, at about twenty-five, thirty, or forty versts asunder; most of

them are on the left bank of the river. At every station are small boats, which are drawn by horses against the stream: there are also persons to row, if that should be necessary.

If the traveller have time before him to perform this journey at his leisure, and wishes to do it in the most convenient manner possible, the best way is to hire a boat at Jakutsk, and carry with him his bed, provisions, kitchen utensils, and all other necessaries; but if, on the contrary, he is in haste, and has not much baggage, he had better take the post. This is to go generally in a small open boat, such as are found at every station, and are regularly changed. In this case, when the river makes a very great winding, or in parts where the water is very shallow, so that the boats get on with difficulty, he can quit the water, and go directly over land to the next station.

If I were to give a regular journal of my proceedings on the present as in the foregoing journey, I should be afraid of wearying my readers; I will therefore pass over it cursorily, only relating such occurrences, and noting down such observations, as appear the most deserving of attention. In geographical and geological respects, and in objects of Natural History, many things are presented well worthy to be studied accurately, and I therefore regretted very much that for reasons, not of sufficient consequence to be here detailed, I was obliged to travel as expeditiously as possible. I hurried over this part of my travels day and night, when that was practicable; but I found new and unexpected difficulties and hardships daily arise, which rendered it often not so. At many of the stations the people were busied in making hay, so that at my arrival

not a living soul was to be seen, and perhaps I was obliged to wait some hours, nay half, or the whole of the night, before I could proceed forwards. At other places the post-boat was in such a wretched situation, it was scarcely safe: sometimes the rowers and steersman were asleep half the night, so that the water was suffered to get into the boat, and I was obliged to stop for some time at the next station to dry my papers, drawings, and linen. Another time, when I had fallen asleep myself during the night, my conductors got at my flask of brandy, and before I was aware of it had made themselves so exceedingly drunk that I was obliged to stop till they were somewhat recovered, and able again to perform their functions. At other stations the horses were perhaps grazing upon an island in the river, nine or ten versts off: sometimes it happened that in fine weather I was obliged to take a covered boat, and when the weather was wet and stormy, to go in an open one. At very few stations did I find every thing in readiness so that I could proceed on my way immediately. Seldom could I get through more than from a hundred and forty to a hundred and seventy versts in the twenty-four hours, and often not more than fifty or sixty.

The Commandant of Jakutsk was so good as to let me have a Cossack as an attendant, but I found him so stupid, and of so little use, or indeed worse, such a burden upon me, that after a week I was obliged to send him back, and continue my journey alone. On the present route were many little villages and towns, which I found the best places for stopping to rest, as I could almost always procure fresh provisions at them. The names, and distances of the principal places from each other, are as follows.

From Jakutsk to Olekma	588	versts.
From Olekma to Witim	682	
From Witim to Kirenki	416	
From Kirenki to Wercholensk	693	
From Wercholensk to Irkutsk	270	
	2599	versts.

On the twenty-third of July, every thing was ready for my departure from Jakutsk. To the first station I went by land in a low miserable kind of carriage, called by the Russians *Rospuski*. The river here winds so much, and is so full of islands and sandbanks, that it makes the way extremely tedious. The highest point of land in this route, a vast chalk rock, on the left bank of the river, about half way between Jakutsk and the first station, is called Chalanski Kamen. Here were several sorts of *astragali* in blow, wholly unknown to me. On the following day I came to Petrofski Monastyr, a monkish convent, where are two ecclesiastics. The country about is every where picturesque; the river abounds with islands, and the herds grazing upon them enliven the landscape very much.

Between the fourth and fifth stations, Tonari and Titori, are rugged cliffs upon the bank of the river, consisting of horizontal crumbly strata of chalk, which, without any effort of the imagination, might be supposed ruined walls. In the neighbourhood of the next station, Batamai, are also steep and in part insulated rocks, called Stolbi, between which a river, the Stolbawoia, seems to have broke its way by force, rushing between towering rocks as through a gateway.

The country about the station of Schura is among the most pleasing parts of the route. The slopes rise gently, and the woods make a charming variety: the Lena is here extremely contracted, not being more than three versts over, and entirely without islands. The opposite bank is rocky, and the scene is bounded by forests. The station from Malikan to Sanajachtak I went on horseback, as I was assured that on account of the steepness of the banks the boat could not here be drawn by horses, and the rowers would get on very slowly. The road lies over a pretty high hill, from the top of which the traveller is presented with a very fine view. Among the plants I found here, were *pedicularea*, *viola*, a new species, *saxifraga geifolia*, *fumaria pæonifolia*, *salicum species complures*, *polypodium fragrans*, *spondylus ceramboides*, *ophrys*, *caryophyllacea*, *spirea crenata*, and many others.

Not far from the third station, before Olekma, and in the neighbourhood of Charabalick, is a very considerable hill, which consists of chalky ruins, and furnishes many very interesting objects to the mineralogist. I found a dark-coloured chalcedony flint, *silex pyromachus*, and wood petrified into a sort of chalcedony. Seventy versts from the station, near the river Talba, I was informed by the Tungusians that a very beautiful red flint is to be found; probably carnelian.

The nearer I approached the town of Olekma, the more wretched did I find the post-stations. The last, Soljanka, which has its name from the salt-springs in the neighbourhood, and is at the distance of twenty-five versts from Olekma, is celebrated for the post-boys running away whenever they see a traveller

arrive; nor did this fail to be the case now. To my great annoyance, I had experienced so many hindrances, that in the last four days I only got on a hundred and fifty-five versts.

On the thirty-first of July I arrived at Olekma, in such a wretched boat that I was completely wet, and was obliged to pass a whole day to dry my papers and clothes. The Commissary, the principal person in the place, received me with much politeness, indicated a place where I might be lodged, and invited me to sup with him. This invitation was the more agreeable, as it was the first regular meal I had taken since I left Jakutsk. Olekma is inhabited principally by merchants and some peasants. The chace, the fishery, breeding cattle, and some agriculture, afford them the principal objects of subsistence. The sables here and about Witim are reckoned the best in all Siberia, and are, on account of their darker colour, and the shining nature of the fur, preferred to those of Kamschatka, although the hair of the latter is much thicker. The dwelling-houses lie on the declivity of a wooded hill, directly above the Lena. Here again this river abounds with islands, which produce excellent grass. The low parts of the town, lying directly upon the water, are frequently overflowed, and are damp all the year through. To this circumstance I ascribe the intermittent fevers, which are exceedingly prevalent here in autumn.

After a day's rest I set out from Olekma. I found the soil directly about the town a mixture of chalk and gypsum. I went the first stage on horseback, as the way by land is very good, but by water very disagreeable, on account of the frequent

shallows. I found some new plants, particularly a *Moræa* and a *Dryas*, between the second and third stations, Tscherindei and Bertimskoe. I saw the mountain Tolokowenoi on the opposite bank; it consists of a sand-stone, the dazzling brilliance of which catches the eye at a great distance. It was at Tscherindei that I dismissed my Cossack, and from hence the rest of my journey was performed alone.

It appeared to me, that as we proceeded up the river from Olekma, the climate became more rugged than about Jakutsk; vegetation was much more backward, and the country was so hilly, that it was less suited to agriculture. The Lena constantly diminishes in breadth, and at the distance of a hundred versts from Olekma is scarcely a verst over. Between the two stations of Charatiba and Matscha, which I went in the night, lies the *Harp Mountain*, as it is called, Guslinaia Gora, on the right bank of the Lena. This naked and rugged hill or rock presents towards the river a flat triangular surface, rising almost perpendicularly like a wall; it consists of strata of red and green marl.

In the way from Schadai to Uschagan, and Schoerba, the forms of the rocky mountains are very remarkable. They vary at every moment, presenting new and picturesque appearances. Here and there rise cliffs in the forms of pillars and of towers, which perfectly resemble ancient Gothic ruins, and afford the clearest proofs of having been brought to their present state by some terrible convulsion of nature.

As we approach Nuja, about half way between Olekma and

Witim, we see fewer habitations of the Jakutschians, while the number of Russian habitations increases in proportion: the Russians occupy themselves principally in agriculture and breeding cattle. The posts begin to be better, so that I got on tolerably well without any long stops or delays: one or two only deserved to be called very bad. Between Chamra and Jellofka grows plenty of excellent timber for building houses and vessels. I went in a canoe, hollowed out of the trunk of a single poplar, which could carry a weight of a hundred and twenty Russian pud. For some time I had been tolerably free from the plague of gnats, but here again they swarmed. The country between Chamra and Witim is mountainous, and affords a rich harvest to the botanist. I found *fumaria peonifolia*, *rubus arcticus*, *arenaria*, *saxifraga geifolia*, *convallaria trifolia*, which is here called Jakutschian tea, *salices*, *carex*, *arbutus uva ursi*, *empetrum nigrum*, *hedysarum*, a new species, with many others.

At Peledui, the last station before Witim, the people were busy at haymaking, notwithstanding which I soon procured horses, men, and a boat. The postmaster was one of the civilest men that I met with in my whole journey; he had engaged in his present office from a love of keeping order, and rendering himself useful to his fellow-creatures. The way from Peledui to Witim is bad by water, but by land almost impracticable. In the evening I arrived at the latter place, which is dignified with the appellation of a town, without having any claim to it whatever. It lies directly opposite the mouth of a river, which bears the same name, Witim, upon a flat neck of land directly on the Lena; and scarcely a year passes that it is not overflowed.

The town contains a hundred houses, with a wooden church, and about six hundred inhabitants: some of them live by agriculture and breeding cattle, but the greater part by hunting the sable. The sable hunters commonly go out about the end of August, taking a year's provisions with them. They row up the river Witim till they come to the neighbourhood of a great lake called Aron or Oronne, which is twenty-five versts in length and eight in breadth; it lies on the left bank of the river, about eight hundred versts from Witim.

The price of a sable-skin varies very much: a couple of the very worst will fetch from fifteen to twenty roubles, but a skin that is entirely black and shining is worth seventy or eighty roubles*. This spot seems exceedingly poor: though I sent all over the place I could not get money for a bank-bill of only five roubles. In the neighbourhood of Witim are salt-springs, and selenites in great abundance. The principal plants that I found in the way from Olekma to Witim, besides those already cited, were *pulmonaria sibirica*, *hedysarum flore rubro*, *potentilla fruticosa*, *lycopodium*, *lychnis*, *thalictrum alpinum*, *anemone narcissiflora*, *cypripedium macranthos*, *cypripedium guttatum*, *pedicularis*, *aquilegia alpina*, *astragali*, *polemonium lanatum*, *actæa spicata*, *carices*, and others.

Late in the evening of the eighth of August, I left Witim, and arrived in the night at Schuja, the first station, on the right bank of the Lena. This place is inhabited entirely by

* More respecting the sables of Witim, and the manner of catching them, may be found in Krascheninnikoff's description of the country of Kamschatka.

Russians: there are no Jakutschians. The banks of the Lena are from Witim enlivened by many little villages, lying at no great distance from each other. Fish are more abundant here than in the lower Lena, where the very great breadth of the river seems to lessen the number of fish. Grazing and agriculture flourish very much. The hilly country in the first fifty versts consists in part of a red and black schistus with quartz, in part of a firm sandstone, with flakes of chalk, which are disposed sometimes horizontally, sometimes in various ways. Among the vegetable kingdom in these parts were *cheiranthus*, a new species, *spiræa lobata*, *euphorbia*, *alyssum montanum*, *anemone*, &c.

The station of Parschinskoe, the third from Witim, and at the distance of sixty-nine versts from that place, is remarkable for the springs in its neighbourhood, which have the name of the *Stinking Springs*. They rush with a considerable noise from a rock which seems to contain a vast quantity of sulphur. The water foams very much, has a very strong sulphureous smell, and tastes salt. The inhabitants use it for curing bruises; they send the water even as far as Irkutsk.

Between the stations of Dubrowa and Tschestu, the valley of the Lena grows constantly narrower, and the cliffs on each side are higher and steeper. About ten versts from the latter place is a narrow pass, which the stream appears to have broken through the rocks. These steep cliffs or rocky walls, are called here Schtschoki; there are three in particular, two on the right bank of the river, and one on the left, which, contracting the stream exceedingly, occasion a great rush of water, and render the navigation somewhat dangerous; this part is there-

fore never passed in the night. These Schtschoki are composed principally of a fine sand-stone mixed with chalk; they are inhabited by an immense number of swallows and martins: nothing can prove more strongly some former great revolution of nature. Here towers aloft a shapeless kind of pillar, there hangs a mass of rock, which seems at every moment ready to fall and crush whatever comes in its way to atoms: here are high perpendicular walls, there caves and grottoes resounding with echoes: every object, in short, is presented which can furnish the painter with the finest ideas of wild and rugged nature.

The botanist, who had leisure nicely to examine the country from hence to the two next stations, Gortschanowa and Mudinsk, would doubtless find his toils richly repaid. Among the plants I found, some of which were already in blow, were a *liliacea* entirely unknown to me, *androsace villosa*, *phlox sibirica*, *valeriana rupestrum*, *cheiranthus*, *geranii*, two species, *rhododendron ferrugineum*, *dryas octopetala*, *anemone*, *narcissiflorus*, *lichenes*, *betula nana salices*, &c. Gortschanowa is in a pleasant and convenient situation; the inhabitants are principally graziers and husbandmen; they have also considerable flocks of sheep, with the wool of which they knit stockings; and a good many swine. I had not seen any of these latter animals since I left Jakutsk. The neighbouring hills abound with Tungusian rein-deer. I was much struck by seeing many of the inhabitants here with goitres. Future travellers who are able to make a longer stay may perhaps investigate the cause of this malady.

One of the most considerable, and most populous villages I had yet seen, was Spoloschnoi, eighty-four versts from Kirenki.

It lies on the right bank of the Lena, and contains about fifty houses. There is a salt magazine belonging to the crown, and a church with two clergymen. From this place the banks of the river were much more inhabited than they had been hitherto. Single houses, mills, large and small villages, were constantly to be seen, the distances from each other not being more than from five to ten versts. Some of them were situated in very pleasing and picturesque spots. One beautiful landscape after another appeared and vanished, so that it almost seemed as if the whole was exhibited on a Camera Obscura.

Early in the morning of the twelfth of August I reached the little town of Kirenka. Vainly did I endeavour to get a bank bill of twenty-five roubles converted into money: no such thing was to be obtained: a clear proof of the extreme poverty of the place. The town lies on the right bank of the Lena, at the junction of this river with the Kirenka. Here is a church and a little inconsiderable custom-house. It is only by a numerous band of soldiers, who are stationed here, that the town can be distinguished from a village. In the neighbourhood of the river Kirenka are found striped jasper, sandstone, and chalk rubbish.

With miserable horses, and a more miserable post-servant, I set forwards in my way late in the afternoon, having been kept waiting by one delay or other a tedious length of time. The journey from Kirenka to Wercholensk is six hundred and ninety-three versts. I performed it with such rapidity that I had scarcely time to make any observations, or to take down any notes. The post-stations here are so much

better regulated than I had hitherto found them, that I got through the whole distance in five days.

At Markofski, a hundred and twenty-five versts from Kirenka, is a government agency, not very long established, emanating from that at Jakutsk: the inhabitants are extremely discontented with this innovation. The place is pretty considerable: it has a church, and a government magazine for corn, the particular purpose of which is to supply, in case of necessity, the peasants with seed-corn, as well as corn for their domestic use, since they often lose a great deal of the produce of their lands from the frequent overflowing of the river. The corn will perhaps be in full ear, and almost ready to be cut, plentiful crops will appear of wheat, of rye, and of barley, when a sudden inundation will come on, and these low lands are buried in sand and slime, so that the whole crop is destroyed; sometimes, even, the land is rendered useless for the rest of the year. It is strange, that, notwithstanding the frequent experience they have had of these disasters, the peasants always select the lowest lands near the river for cultivation.

On the fourteenth, early in the morning, I reached Ustkuta, where the Lena is navigable for large merchant-vessels that draw a Russian ell of water. The different articles of merchandise therefore brought hither in small boats from Wercholensk and Jakutsk are removed into these larger vessels, whence they are transported by means of the Angara, and other streams that join the Lena, to Jenissei, and various parts. To Ilimsk they are commonly transported by land over a small tract of

about a hundred versts. The natural situation of Omoloi, the next station to Ustkuta, is less advantageous for agriculture than much of the country I had hitherto passed: even barley will scarcely come to perfection. The hills are high, stony, and woody: arable land is scarcely to be seen, and the inhabitants are obliged to barter the fine grey squirrel skins they collect, with their neighbours for corn.

I proceeded on my journey the two following days partly by land, partly by water, and arrived at Wercholensk late in the evening of the sixteenth. This place lies upon the right bank of the Lena, and contains between two and three hundred houses: the river is still navigable from hence to the next station, Katschuk. Although I had firmly resolved to proceed forwards the same evening, I suffered myself to be persuaded by the Commissary M. Schweleff, who received me with great politeness, to stay the night here. He assured me that the road by land was frightful, and almost impracticable in the dark; and if I were to go by water, it must be in a very small flat-bottomed boat, while the numerous windings made by the river would occasion me a great loss of time.

On the seventeenth, early in the morning, I mounted my horse, and pursued my way by land. I found that the road lay over very high steep hills, and I reached the next station, Katschuk, at the distance of thirty versts, extremely fatigued. Here I took my final leave of the Lena, which was become a very insignificant stream. From Katschuk to Irkutsk, a distance of a hundred and ninety-six versts,

there is a post-carriage, by means of which the traveller may reach the capital of Siberia in twenty-four hours.

In this neighbourhood live the Bratski or Buratians, a people of Mongol origin, and in general a much more robust race than the Jakutschians. They wear a long white garment like a night-gown, bordered with fur, and tied round the waist. Some of these people are nomades, and live in felt huts; others, who inhabit the neighbourhood of the great road, speak Russian, and have built themselves wooden houses after the Russian fashion. Their principal source of subsistence is grazing cattle; a few only employ themselves in agriculture. The nearer I approached to the capital, the more did I find the country inhabited: there were a great number of Russian villages, some consisting of between two and three hundred houses. The fields were well cultivated, producing rye, barley, oats, and hemp.

About eight versts from Irkutsk, on the top of a gentle eminence, I enjoyed a most charming prospect. The valley of Angara with the town of Irkutsk lay spread before me. The number of stone churches in the town, with their glittering cupolas and towers, communicated a pleasing impression from the idea they gave of wealth and prosperity. At the same time I must confess that the nearer I approached the town, the more was this impression removed, from the great contrast presented by the number of miserable wooden huts with which these pompous buildings were intermingled.

It was on the eighteenth of August that I entered the Siberian

capital. I alighted at the house of the agent of the Russio-American Company, to whom I had a letter of recommendation, and was by him invited to take up my quarters here. Although in all Siberia there is no such thing, properly speaking, as an inn, a traveller will scarcely ever fail of finding some place where he can be lodged, provided always that he must carry his bed with him. Irkutsk lies on the right bank of the rapid and transparent river Angara. The streets are broad, and in general regular, but they are not paved: the houses are built for the most part of wood, though some, as well as the government-buildings and churches, are of stone. The churches are thirty in number, and there are two convents: the population is estimated at about thirty thousand. As this is the seat of government, there is here a governor-general, a civil-governor, a vice-governor, a commandant of the town, a principal civil-magistrate, and an archbishop. The present governor was the Privy-Counsellor and Senator Von Pestel: he had set out on a journey to Tomsk and Tobolsk the very day of my arrival.

Among the public buildings are to be distinguished the Custom-House, which is very spacious, and built of stone; the Gymnasium, in which there is a library consisting of several thousand volumes, with a collection of mineralogy and conchology. It is worthy of remark, that by the command of her Imperial Majesty the late Empress Catherine, the Japanese language is taught, and that the teacher of it is a native of Japan. The occasion of his being settled here has been noticed in the former part of this work. Though the theatre is very

small, it deserves to be mentioned: I saw some Russian pieces not ill played. Without the town there is a large workhouse, or house of correction for criminals. Not far from thence is an admiralty, which contains a variety of articles to be sent to Ochotsk for the government vessels there; a part are also destined for the navigation of the lake of Baikal. A large infirmary or hospital for the sick was nearly completed. The government medicine stores are considerable, and well kept. To the apothecary who presides over this institution a piece of garden-ground has been allotted for the cultivation of medicinal drugs; but it is a great pity, that for want of time, and hands to work, very little advantage is derived from it. A medical police, or at least what is so called, is established here, which consists of an inspector, an operator, and an accoucheur: their services are perhaps better known to others than to me. How useful might a man with a good head and a benevolent heart make himself in such a situation. As long, however, as the higher powers do not trouble themselves with taking care to appoint to such posts men of knowledge and zeal to labour properly in their vocations, the community must fail of deriving all the advantages that might be derived from them, and knowledge must be deprived of many valuable observations.

The town of Irkutsk carries on a very considerable trade: it is the general depôt of all the furs from America and the eastern parts of Asia, and at the same time the staple of all the merchandize to be transported from Russia through Kiachta to China, and through Ochotsk to Kamschatka and America, as well as what is to be transported from those places to Russia.

An European therefore will find that he can purchase here almost every object to which he has been accustomed in his native country: even the best foreign wines were at this time to be obtained at a very reasonable price. Scarcely however can it admit of a doubt that these things are since much changed: very bad wines are now sold at St. Petersburgh for double the price I then gave for the best at Irkutsk; it is not therefore probable that they remain at the latter place the same as they then were.

The mode of living among the inhabitants has several peculiarities. Here are many Oriental customs, and very little happiness. The greatest distrust of each other prevails among the people of all ranks. A stranger seldom sees the wives and daughters of the most distinguished citizens, excepting at public festivals, balls, weddings, christenings, or at church; in a social circle they are never to be seen. The place abounds with unhappy exiles: they are left entirely at liberty, and some by their industry have acquired property: among them may be found the most skilful artisans and mechanics of every kind. Irkutsk lies in latitude 52° north, consequently not in a very rugged and ungenial climate. The summer is pleasant, and upon the whole it is very far from being the horrible abode which is generally supposed. The country about produces a superabundance of corn; and those who wish for luxuries, and have the means of affording them, may purchase them at a very reasonable rate.

The plan of my book, and the limits to which I have cir-

cumscribed myself, will not permit me to enter into an account of daily occurrences during the remainder of my journey. A hasty winter progress, such as mine was, furnishes besides few observations and occurrences worthy of being recorded, and such observations as I might have to offer have been anticipated by former travellers, who had more leisure to examine things carefully. Suffice it to say, that after staying some days at Irkutsk, I set off on the twenty-eighth of August, 1807, to visit the Russio-Chinese frontier town of Kiachta, whence I returned to Irkutsk on the twelfth of September.

My views were now directed towards St. Petersburgh, as my principal object; but as I had a great deal of luggage, I was strongly advised to wait till the sledges could begin to run, since I must otherwise travel in the autumn, when the rains would have made the roads so bad, that I should only be able to proceed very slowly. To these reasons I found myself compelled to yield, and did not therefore quit the capital of Siberia till the twenty-second of November, when I set off with the first sledges. The posts along this route are extremely well regulated.

On the twenty-seventh I arrived at Krasnojarsk, a tolerably regular built town, on the river Jenissei: it stands in a beautiful and fertile valley, and contains five hundred houses, and four churches. It was rendered remarkable to me as having been the place where the Chamberlain Von Resanoff lost his life in the preceding March. I had scarcely alighted in the quarters assigned to me by the police, when I received a visit

from the principal magistrate of the place, Counsellor Keller. This visit gave me the greater delight, as I found that he was a native of Frankfort. I stopped for the night at Krasnojarsk, supping with my countryman, and on the twenty-eighth, in the morning, visited the tomb of the Baron Von Resanoff. It is a large stone, in the fashion of an altar, but without any inscription.

On the first of December I arrived at Tomsk, and passed a few days after over the Barabin heath, where a terrible murrain rages almost every summer among the cattle: my friend, Doctor Bojanus, Professor of the Veterinary Art at Wilna, considers it as a disease of the spleen. On the eleventh of December I reached Tobolsk, the ancient capital of Siberia, where I became acquainted with the Governor-General of Siberia, M. Von Pestel. I found him extremely polite, and he seemed much interested by the information I had the honour of giving him respecting the remote parts of his government, particularly Kamschatka. In compliance with his friendly invitation I stayed at Tobolsk longer than I intended, and found the days that I passed with him and his amiable family by far the most agreeable that I had experienced for a long time. To a traveller who had lived almost among savages for some years, nothing could be more delightful than the society of so amiable a woman as Madame Von Pestel. It was not without great regret, and being deeply affected, that I parted from this charming couple on the twenty-second of February, 1808, to proceed on my journey.

On the first of March I arrived at the fine town of Kasan; on the eighth I reached Moscow, and at length, on the sixteenth of the same month, entered Petersburgh. Thus did I first become acquainted with this magnificent imperial city, the most splendid in all the Russian empire, after having traversed that vast empire through its whole extent from east to west.

ERRATA.

Page 6, line 13, for *statues*, read *statutes*.
25, —— 17, after *found*, add *a*.
45, —— 19, for *neighbour's*, read *neighbours*.
186, —— 15, for *has*, read *have*.
213, —— 20, for *with*, read *by*.
244, —— 6, after *steepness*, add a comma.
262, —— bottom line, after *all*, add *the*.
302, —— 3 from the bottom, for *we*, read *he*.
314, —— 22, dele the semicolon.

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THE END.

B Clarke, Printer, Well Street, London.